

Internet Governance and Democratic Legitimacy

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I. INTRODUCTION

Decentralization, user empowerment, and interoperability are engineering principles that have made the Internet an unrivaled medium for innovation today.¹ The Internet's remarkable growth has forced policymakers and legal scholars generally to privilege these principles above all others in their approach to Internet governance. Prominent legal scholars, for example, have enlarged the normative significance of decentralization, user empowerment, and interoperability by identifying them with prevailing administrative law doctrine and policy. Some would have governmental policymakers defer substantial first-instance rulemaking authority to private self-regulatory organizations, like the Internet Engineering Task Force (IETF), for which decentralization, user empowerment, and interoperability are a priority.² The geographically dispersed engineers and application designers who populate the Internet, these legal scholars assert, are far better suited than centralized agency bureaucrats to develop the rules for broadband network management.³

1. See Memorandum from the Network Working Group on Internet Best Current Practices (Oct. 2004), available at <http://www.ietf.org/rfc/rfc3935.txt> ("The Internet isn't value-neutral, and neither is the IETF. . . . We embrace technical concepts such as decentralized control, edge-user empowerment and sharing of resources.") [hereinafter NWG 2004 Memo].

2. Philip J. Weiser, *The Future of Internet Regulation*, 43 U.C. DAVIS. L. REV. 529 (2009); Kevin D. Werbach, *Higher Standards: Regulation in the Network Age*, 23 HARV. J.L. & TECH. 179, 217 (2009).

3. *Hearing on The Role of Standards in Growth of the Global Electronic Commerce Before the Subcomm. on Sci., Tech. & Space, House Comm. on Commerce, Sci. & Tech.*,

Besides, the strongest version of this argument goes, the deliberative processes by which the IETF develops transmission standards are far more transparent and democratic than extant governmental processes.⁴ This administrative approach does not recommend any particular substantive rules apart from those developed by standard-setting organizations, like the IETF.⁵ I refer to this as the “technological” approach. The FCC’s decision in August 2008 reprimanding the Comcast Corporation for blocking access to applications that require high bandwidth without subscribers’ consent is the most recent and prominent articulation of this approach.⁶

Other legal scholars identify the engineering principles of decentralization, user empowerment, and interoperability with economic analysis—what I call here the “economic” approaches to broadband policymaking. Adherents of emergence economics, for example, draw on the theory of network effects to argue that universal access and nondiscrimination rules (colloquially referred to as “network neutrality”), in particular, will help to grow the economy and, as a result, improve consumer welfare.⁷ Writers in this line tend to argue for a policy of network neutrality that would, first, bar network owners and broadband service providers from blocking users’ access to online applications and content without their consent, and, second, forbid network owners from unreasonably discriminating against unaffiliated applications, services, and content.⁸

Adherents of classic liberal economic theory, on the other hand, posit that centralized government administration (through, for example, the enforcement of network neutrality) is a hindrance to the efficient operation

106th Cong. (1999) (statement of Andrew J. Pincus, Gen. Counsel, Dep’t of Commerce), available at <http://www.ogc.doc.gov/ogc/legreg/testimon/106f/pincus1028> (“The needs and dynamics of the marketplace, and not governments, must guide standard development and implementation activities. Governments should refrain from issuing technical regulations and instead should rely, to the maximum extent possible, on the private sector to self-regulate.”).

4. Stacy Baird, *The Government at the Standards Bazaar*, 18 *STAN. L. & POL’Y REV.* 35, 41-54 (2007) (discussing the sufficiency of the processes by which non-governmental bodies develop governing standards); A. Michael Froomkin, *Habermas@Discourse.net: Toward a Critical Theory of Cyberspace*, 116 *HARV. L. REV.* 749, 809-10 (2003).

5. Baird, *supra* note 4, at 41-54.

6. See *Comcast Corp. v. F.C.C.*, 579 F.3d 1 (D.C. Cir. 2009); Formal Complaint of Free Press & Public Knowledge Against Comcast Corporation for Secretly Degrading Peer-to-Peer Applications, *Memorandum Opinion and Order*, 23 F.C.C.R. 13028 (2008) [hereinafter *Comcast Order*]; see also Press Release, FCC, FCC Chairman Genachowski Statement on D.C. Circuit Oral Arguments in Comcast v. FCC (Jan. 8, 2010), available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-295560A1.pdf.

7. See generally Richard S. Whitt & Stephen J. Schultze, *The New “Emergence Economics” of Innovation and Growth, and What It Means for Communications Policy*, 7 *J. TELECOMM. & HIGH TECH. L.* 217 (2009).

8. *Id.*

of the broadband market.⁹ A competitive market, comprised of rational and enterprising network owners, broadband service providers, application developers, and casual users is far more efficient at producing and distributing information goods and services.¹⁰ Policymakers, these theorists argue, should apply a light regulatory touch and let market actors privately organize the structure and flow of communications.¹¹ Consumer welfare may even benefit from arrangements in which network owners collaborate exclusively with certain application and content providers at the expense of others.¹²

This Article attempts two overlapping interventions: First, it develops a novel three-part taxonomy of broadband governance and policy. Second, it demonstrates that the prevailing approaches are not fully adapted to the uniquely public and political influence of communications. Of course, as an administrative matter, it makes perfect sense to delegate complex engineering matters to the engineers and entrepreneurs in the field. Such matters are often far better suited at finding the most sustainable and welfare-maximizing models for information distribution and production. But, generally, the deferential posture of the prevailing approaches surrenders too much at the expense of historically important objectives of communications policy: namely, universal access and robust public life. It would be as if the postal service delegated most or all first-instance postal policymaking to highway engineers, oil and gas companies, truck manufacturers, and bulk-paper producers because they know more than everyone else about associated technological or economic problems.

Thus, the Article's chief aim is to make plain that the prevailing approaches to broadband Internet policymaking are unduly entranced by

9. See, e.g., Scott Burris, Michael Kempa & Clifford Shearing, *Changes in Governance: A Cross-Disciplinary Review of Current Scholarship*, 41 AKRON L. REV. 1, 32-33 (2008) (discussing the importance of decentralized governance to facilitate information flow through networks).

10. See, e.g., Kevin Werbach, *The Centripetal Network: How the Internet Holds Itself Together, and the Forces Tearing It Apart*, 42 U.C. DAVIS L. REV. 343, 410-11 ("Network structures on the Internet are the product of strategic decisions by many independent agents, who focus on their own perceived interests rather than those of society. In general, such decentralized, market processes produce remarkably good results, for both economic efficiency and for normative measures of individual welfare.").

11. See, e.g., Baird, *supra* note 4, at 86 ("To conclude, there must be a significant and substantial market failure before the government should consider intervening, and even where such a failure exists, the government should consider several mitigating factors before acting.").

12. See, e.g., Werbach, *supra* note 10, at 351-52 (discussing the benefits of efficient collaboration facilitated by the Internet, as well as the occasional establishment of dominant centers such as Google, YouTube, eBay, Facebook, and MySpace).

the promise of innovation and commerce for their own sake.¹³ These approaches do not contemplate the fact that communications are vital to the operation of civil society in democracy, irrespective of their impact on innovation and commerce. Accordingly, I argue for a rethinking about broadband policymaking. The FCC's presumptive administrative deference to, on the one hand, the transmission standards set by the IETF and other expert nongovernmental organizations and, on the other hand, private ordering is flawed particularly now that the Internet is no longer the boutique curiosity of even fifteen years ago.

Policymakers should give more serious consideration to the third category in the three-part taxonomy laid out here—civic participation. Some writers have looked to a theory of republicanism and its normative claim that citizens ought to be able to engage each other on matters of common concern in delimited public forums.¹⁴ While this conception offers important insight on the role of communications in democracy, its recommendations for substantive law and policy do not directly address the central problem I raise here: whether or when deference to private self-regulatory organizations on communications matters is appropriate. Republicanism, moreover, does not map well on to the decentralized network design of the Internet. Its proponents' characteristic recommendation for delimited public forums is practically impossible to implement as so much of the content and uses comprising the Internet are diverse.¹⁵

Participatory governance theory, on the other hand, offers a more fitting civic-minded conception of communications policymaking. It recommends public involvement in policymaking in varying degrees depending on the subject matter. I argue here that communications is one policy area that should always be legitimated one way or another by public processes and not subject to ad hoc liberal deference to nongovernmental self-regulatory organizations. Indeed, as a historical matter, policymakers

13. Cf. James W. Carey with John J. Quirk, *Communications as Culture: Essays on Media and Society* 113, 120 (1989) (citing Leo Marx).

14. See *infra* Part IV.A.

15. The digital packet-switching transmission technology and protocols that currently structure the flow of Internet communications afford users the unprecedented ability to do so much more with information than before and at such a larger scale. Jack L. Goldsmith, *Against Cyberanarchy*, 65 U. CHI. L. REV. 1199, 1237-38 (1998) (discussing the "dramatic increase in the number and speed of transactions" in cyberspace in the context of "a nation's incentives [to] regulate" and the efficacy of regulation); see also JANET ABBATE, *INVENTING THE INTERNET* 1-20 (2000) (discussing packet switching and its facilitation of efficient, large-scale communication).

have implemented public-regarding models particularly because of communications' unique public role.¹⁶

In this Article, I argue that, in their adamant failure to accommodate public-regarding consideration, the technological and economic approaches to broadband policymaking have not adapted to the social influence of the Internet. I organize this argument into three parts. Part I analyzes and critiques the FCC's August 2008 *Comcast* decision, observing that it is only the most recent iteration of the technological approach. I conclude that, at a time when the Internet is as pervasive as it is today, such an approach is no longer sufficiently legitimate because it defers to engineering principles as though they have the moral force of law. This move, I argue, is inadequately reflective of the uniquely social and volitional aspect of communications. In Part II, I argue that the technological approach to broadband policymaking overlaps substantially with prevalent liberal economic approaches to substantive broadband policy. Before critiquing two such approaches, however, in Part II.A, I briefly survey the exemplars of the extant procompetitive norms in telecommunications law and policy since the 1960s. Part II.B discusses and then critiques the emergence economics claim on broadband policy associated generally with arguments for network neutrality and the nondiscrimination principle generally. In Part II.C, I review and critique the classic welfare economics approach to broadband policy. I conclude Part II.D by speculating about how the economic approaches have come to occupy such an influential role in broadband policymaking.

In Part III, I sketch a complementary normative approach to communications policymaking—one that, I argue, is true to the uniquely public character of communications policy and policymaking. While technological expertise and economic metrics are important, I explain, they cannot account for the unpredictable political and social role communications play in democracy. Broadband policymaking, I argue, has neglected this fact even as, historically, policymakers were attuned to it. Participatory governance theory, I assert, shows us the way forward. Its attention to the processes of policymaking or governance exposes the flaws in the current Internet governance regime. The sort of deference that empowered engineers and entrepreneurs to grow the Internet into the pervasive medium of today is no longer sustainable; the Internet's impact is too massive to be left to private decision makers in the first instance. I conclude with sketches for public-minded reform.

16. The postal system is one such example. See Sharon M. Oster, *The Postal Service as a Public Enterprise*, in GOVERNING THE POSTAL SERVICE 31-35 (J. Gregory Sidak ed., 1994).

II. THE TECHNOLOGICAL APPROACH TO BROADBAND POLICYMAKING

A. *The Affordances and Capabilities of Broadband*

The Internet has gone pop. It is no longer a boutique means of communication and commerce. As the FCC reports, “[t]oday, the majority of U.S. businesses and households have broadband connections, and access to the Internet through a variety of technologies—fiber, copper, cable, wireless, and satellite—is an integral and critical part of American life.”¹⁷ Large swaths of the population can now “report, comment, and generally play the role traditionally assigned to the press in observing, analyzing, and creating political salience for matters of public interest.”¹⁸ Curatorial conventions, like “most viewed” lists and sophisticated popularity ranking technologies, render the prodigious amount of content on the Internet intelligible and useful.¹⁹ The 2008 presidential election and the volunteerism and artistry that helped to determine its outcome pretty much closed the debate on how deep the impact of the Internet can be.²⁰ The Internet’s significant global impact was vividly on display in the wake of the contested 2009 presidential election in Iran; government efforts to crush Iranian street protests were exposed by the photographs and “tweets” of protestors wielding mobile devices.²¹

17. A National Broadband Plan for Our Future, *Notice of Inquiry*, 24 F.C.C.R. 4342, para. 2 (2009) [hereinafter *Broadband NOI*]. Internet penetration at the household level has climbed steadily since the mid-1990s to about sixty-four percent in 2008. Mario Callegaro & Tom Wells, *Is the Digital Divide Still Closing? New Evidence Points to Skewed Online Results Absent Non-Internet Households*, KNOWLEDGE NETWORKS, Summer 2008, available at <http://www.knowledgenetworks.com/accuracy/summer2008/callegaro-wells.html>. The percentage of adults in the United States who have a broadband connection at home has grown from under five percent in June 2000 to fifty-five percent in April 2008. JOHN B. HERRIGAN, PEW INTERNET & AMERICAN LIFE PROJECT, HOME BROADBAND ADOPTION 2008, 1 (2008).

By “broadband service,” I refer to “advanced telecommunications” and information service. See Broadband Data Improvement Act, Pub. L. No. 110-385, § 103, 122 Stat. 4096 (2008) (codified as amended in scattered sections within titles 47 and 15 of the United States Code). “Advanced telecommunications” is defined as “high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology.” 47 U.S.C. § 1302(d)(1). The FCC defines broadband service as anything exceeding 200 kbps in at least one direction and has sought to increase that definition to over 768 kbps or even 1Mbps. *Broadband NOI*, *supra* note 17, at para. 14.

18. YOCHAI BENKLER, THE WEALTH OF NETWORKS: HOW SOCIAL PRODUCTION TRANSFORMS MARKETS AND FREEDOM 220 (2006).

19. See Kevin J. Delaney, *Web Sites’ Lists of “Most Viewed” Too Easy To Game?*, WALL ST. J., May 15, 2007, at B1.

20. Robert G. Boatright, *Campaign Finance in the 2008 Election*, in THE AMERICAN ELECTIONS OF 2008 158 (Janet M. Box-Steffensmeier & Steven E. Schier eds., 2009).

21. HOLLIS THOMASES, TWITTER MARKETING: AN HOUR A DAY 58 (2010).

The network-design features that have made the Internet an especially transformative medium are captured in three principles championed by the IETF, the preeminent technical standard-setting organization for the industry: decentralization, user empowerment, and interoperability.²² Generally, and as used in this Article, decentralization refers to a spatially dispersed network (or network of networks) whose use does not depend on any one person or institution.²³ The Internet today, for example, operates on the basis of an Internet Protocol suite (Transmission Control Protocol and Internet Protocol (TCP/IP)) that basically disaggregates portions of a whole message into smaller digitized packets which are transmitted separately through a widely distributed network of automated routers, servers, and caches in the most efficient way possible to addressees.²⁴ Interoperability refers to the principle that independent computer networks are not barred from freely exchanging information with others.²⁵ User empowerment similarly refers to the notion that nothing in the maintenance of the physical network may interfere with any user's access to all of the services, applications, and other users of her choice.²⁶

Many broadband-application designers, in particular, have converted these design features into transformative retail offerings. Peer-to-peer protocols and applications, in particular, pose formidable competitive threats to the traditional "hub-and-spoke" political economy of communication networks as they afford popular involvement in the

An example of a viral meme occurred during the 2009 Iranian presidential elections. When the election results led to charges of corruption by opposition voters and protestors took to the streets, the government intermittently shut down the Internet and forced out most of the external news media. Twitter became a major vehicle for the dissemination of news, both within Iran among the protestors and for the rest of the world observing the turmoil.

Id.

22. See Memorandum from the Network Working Group on Internet Best Current Practices (Feb. 2002), available at <http://tools.ietf.org/html/rfc3233>; see also ALEXANDER R. GALLOWAY, PROTOCOL: HOW CONTROL EXISTS AFTER DECENTRALIZATION 130-140 (2004).

23. See Robert E. Kahn & Vinton G. Cerf, *What Is the Internet (and What Makes It Work)?*, in OPEN ARCHITECTURE AS COMMUNICATIONS POLICY: PRESERVING INTERNET FREEDOM IN THE BROADBAND ERA 17, 18-19 (Mark N. Cooper ed., 2004); JONATHAN L. ZITTRAIN, THE FUTURE OF THE INTERNET AND HOW TO STOP IT 28 (2008).

24. The Interface Message Processor, created by researchers in the mid-1960s, was the first of these. Mitch Waldrop, *DARPA and the Internet Revolution, in 50 Years of Bridging the Gap*, (2009), available at http://www.darpa.mil/Docs/Internet_Development_200807180909255.pdf. The physical facilities that comprise the Internet, in the evocative words of the most-celebrated designers, are "the equivalent of many bucket brigades spanning continents and oceans, moving buckets of electronic postcards from one computer to another." Kahn & Cerf, *supra* note 23, at 20.

25. See, e.g., J.R. OKIN, THE INTERNET REVOLUTION: THE NOT-FOR-DUMMIES GUIDE TO THE HISTORY, TECHNOLOGY, AND USE OF THE INTERNET 143-150 (2005).

26. See, e.g., User Empowerment, Center for Democracy and Technology, <http://www.cdt.org/grandchild/user-empowerment> (last visited Feb. 23, 2010).

production and distribution of extraordinary amounts of information among individual consumers qua users.²⁷ BitTorrent, for example, poses a significant competitive threat to video-on-demand services provided by most multichannel video programming distributors (MVPDs) like Comcast or Time Warner. The protocol does not require the centralized storage capacity necessary for video storage. Instead, users can distribute and access any available large video file through a “swarm” of Internet connections rather than a limited single transmission conduit.²⁸

B. A Problem of Network Management: The Comcast Case

Peer-to-peer applications are exploiting networks owners’ respective bandwidth capacity without paying the monetary costs for their subscribers’ use; they and their subscribers pay nothing more than what all other broadband service providers might pay to network owners for Internet access.²⁹ A very small minority of peer-to-peer application users may occupy such a disproportionately large amount of available bandwidth at any given time that they diminish perceptibly the casual online experience of the majority of users.³⁰ Network owners insist that, in order to sustain a minimum quality of service for all of their subscribers, policymakers permit them to charge customers a premium for bandwidth

27. See BENKLER, *supra* note 18, at 179. The FCC has become increasingly interested in the ways in which peer-to-peer protocols and applications are changing the structure of the video distribution market. It published a *Notice of Inquiry* in February 2009 pursuant to its obligations under Section 628(g) of the Communications Act in which it, for the first time, requested data on “video programming distributed over the Internet and via Internet Protocol (IP) networks.” Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, *Notice of Inquiry*, 74 Fed. Reg. 6875, para. 3 (2009).

28. BitTorrent is both a protocol, free to whoever can deploy it, and an application (i.e., Internet client) available through the BitTorrent Web site. Unlike most other file-sharing protocols on the Internet, the protocol does not use a single TCP connection between a user and its server in order to deliver the content. Instead, each of its member “peers” downloads content from other consensual peers’ computers, often downloading different portions of whatever content they are after (e.g., a feature film) from different computers. (The collection of computers providing portions of the sought-after content at any given time is called a “swarm.”) Peers, in turn, may upload content to other member “peers.” Imre Kelenyi & Bertalan Forstner, *SymTorrent and GridTorrent: Developing BitTorrent Clients on the Symbian Platform*, in *MOBILE PEER TO PEER (P2P): A TUTORIAL GUIDE* 105-108 (Frank H. P. Fitzek & Hassan Charaf eds., 2005); see also, Paul Gil, *Torrents 101: The Basics of How Bittorrents Work*, ABOUT.COM, Jan. 2010, <http://netforbeginners.about.com/od/peersharing/a/torrenthandbook.htm>.

29. See Todd Spangler, *Cox To Test Bandwidth-Throttling System*, MULTICHANNEL NEWS, Jan. 28, 2009, http://www.multichannel.com/article/162872-Cox_To_Test_Bandwidth_Throttling_System.php (last visited Feb. 23, 2010).

30. See *Comcast Order*, *supra* note 6, at 13093 (2008) (Comm’r McDowell, dissenting).

use or, not unlike the tiered pricing of cable or telephone service, charge for use of particular applications.³¹

The most ardent critics of such network-management schemes respond that efforts to differentiate Internet traffic on the basis of content or applications undercut the open network design that has made the Internet a dynamic engine for innovation.³² They advocate a policy of what is colloquially referred to as “network neutrality.”³³ For support, these critics often refer to two sources of authority: the transmission standards enunciated by the IETF and the FCC’s slackly phrased 2005 *Internet Policy Statement*.³⁴ The former serves as the de facto “repository for the standards and protocols that underlie the functioning of the Internet.”³⁵ The IETF’s transmission standards require, in short, “decentralized control, edge-user empowerment and sharing of resources.”³⁶ The *Internet Policy Statement*, on the other hand, is the FCC’s first public statement on broadband network management practices.³⁷ It enumerates four agency-determined consumer interests that ought to define broadband service: (1) access to lawful content of their choice, (2) the ability to run applications of their choice, (3) the ability to attach devices of their choice to their respective service provider’s network, and (4) competition in the market for broadband service.³⁸

Some legal scholars also advance an argument that sounds in antitrust.³⁹ As applied to the provision of wireline broadband service today,

31. *Id.*

32. Preserving the Open Internet Broadband Industry Practices, *Comments of Electronic Frontier Foundation*, GN Docket No. 09-191 (January 14, 2010), available at <http://www.eff.org/files/filenode/nn/EFFNNcomments.pdf>.

33. See Tim Wu, *Network Neutrality, Broadband Discrimination*, 2 J. ON TELECOMM. & HIGH TECH. L. 141 (2003).

34. See, e.g., Barbara van Schewick, Stanford Law School, *The Network Neutrality Debate—An Overview* (July 30, 2009), available at <http://www.ietf.org/proceedings/75/slides/plenaryt-5.pdf>.

35. See *Comcast Order*, *supra* note 6 at para. 45; see also, NWG 2004 Memo, *supra* note 1, at § 4.1.

36. NWG 2004 Memo, *supra* note 1, at § 4.1.

37. Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, *Policy Statement*, 20 F.C.C.R. 14986 (2005) [hereinafter *Internet Policy Statement*].

38. *Id.* at para. 4.

39. See, e.g., Timothy J. Brennan, *Essential Facilities and Trinko: Should Antitrust and Regulation Be Combined?*, 61 FED. COMM. L.J. 133, 141-43 (2008); Jonathan E. Nuechterlein, *Antitrust Oversight of an Antitrust Dispute: An Institutional Perspective on the Net Neutrality Debate*, 7 J. ON TELECOMM. & HIGH TECH. L. 19, 24-26 (2009); J. Thomas Rosch, Commissioner, FCC, *Broadband Access Policy: The Role of Antitrust* (June 13, 2008), in 25 CORP. COUNSEL’S QUARTERLY 1, 4 (2008); Daniel F. Spulber & Christopher S. Yoo, *Mandating Access To Telecom and the Internet: The Hidden Side of Trinko*, 107 COLUM. L. REV. 1822, 1848-49 (2007).

however, their argument is not premised on any legal rule under the 1934 Communications Act. These writers argue that either Congress or the FCC or the Federal Trade Commission (FTC) should implement explicit rules that guard against network owners' incentive to leverage their gatekeeping positions in order to cripple online video-sharing services and applications.⁴⁰ Of particular concern are, on the one hand, MVPDs whose video-on-demand services compete with online video-sharing applications and, on the other hand, telecommunications companies whose plain old telephone services compete directly with Internet-enabled voice service. These antitrust advocates argue that, at a minimum, a fifth *Internet Policy Statement* principle could bar these information-service providers from blocking, degrading, or otherwise discriminating against online content, services, or applications with which their own lines of video or voice business compete.⁴¹ Very recently, the FCC initiated a rulemaking to consider a sixth network neutrality or "open internet" rule: transparency.⁴²

The FCC recently attempted to define the terms of lawful broadband network management in response to a complaint that cable giant Comcast was deliberately degrading or altogether blocking its subscribers' use of high-bandwidth peer-to-peer sharing applications.⁴³ The FCC ultimately agreed with the petitioners after conducting two highly publicized public hearings.⁴⁴ The FCC found that, notwithstanding the cable giant's nontrivial concerns over traffic congestion, Comcast's practice of secretly blocking certain high-bandwidth applications was unreasonable.⁴⁵ The company's actions, the FCC concluded, violated the loosely worded priorities outlined in the *Internet Policy Statement* and industry engineering standards for the transmission of packet-switched data.⁴⁶

40. See *supra* note 39.

41. Cheryl Bolen, *Net Neutrality Agreement Close, but Not Final for Network Operators*, 14 ELECTRONIC COM. & L. REP. 905 (2009). While even senior executives at the major networks, like Verizon and AT&T, have asserted that they could live with such a nondiscrimination rule, the policy debate about network management is hardly resolved. *Id.* Network owners have valid (i.e., not anticompetitive) reasons to ration bandwidth. For more on the fifth principle, see Preserving the Open Internet, *Notice of Proposed Rulemaking*, 24 F.C.C.R. 13064, at paras. 103-117 (2009).

42. Preserving the Open Internet, *Notice of Proposed Rulemaking*, 24 F.C.C.R. 13064, at paras. 118-132 (2009).

43. See *Comcast Order*, *supra* note 6, at para. 1.

44. See *id.* at paras. 11, 57.

45. See *id.* at 13066 (Statement of Chairman Kevin J. Martin), ("Applying this framework, we find that it was unreasonable for Comcast to discriminate against particular Internet applications, including BitTorrent.").

46. See *id.* at para. 16.

We conclude that acting on the complaint is reasonably ancillary to this delegation of authority in several ways. First, prohibiting unreasonable network discrimination directly furthers the goal of making broadband Internet access service both "rapid" and "efficient." The practice of inhibiting consumer access to

As evidenced by the *Comcast* decision, in particular, the FCC has failed to provide any normative direction outside of deferring to extralegal rules on users' rights or network owners' obligations. The possibility that the case might be adjudicated pursuant to legislated antitrust norms was merely noted by the FCC.⁴⁷ The law governing the provision of wireline broadband service after *Comcast* amounts to little more than a policy of liberal deference to Internet engineers, programmers, and entrepreneurs.

1. The Decision

In April 2007, the FCC initiated an inquiry pursuant to its statutory authority to oversee the successful deployment of broadband service.⁴⁸ This inquiry sought, among other things, to collect data on broadband industry practices and assess the state of broadband service generally and what steps it could take to ensure its "reasonable and timely" deployment.⁴⁹ In August 2008, the FCC published a partial answer to this inquiry in its disposition of a complaint against Comcast.⁵⁰ The complainants had alleged that the cable giant was deliberately degrading customers' access to BitTorrent and other peer-to-peer Internet applications used for transferring large data files in violation of the *Internet Policy Statement*.⁵¹ After receiving anecdotal evidence and general data on network-trafficking trends,⁵² the FCC agreed with the petitioners and enjoined Comcast from "throttling" its customers' access to high-bandwidth peer-to-peer applications like BitTorrent.⁵³

The FCC found that Comcast was, first, secretly terminating its subscribers' live network connections when network traffic reached a threshold level and then, second, sending to the offending users a message

certain content and applications has the obvious effect of making the service slower even when doing so would not necessarily ease network congestion.

47. See *Comcast Order*, *supra* note 6, at para. 47.

48. Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, *Notice of Inquiry*, 22 F.C.C.R. 7816, para. 1 (2007). Both proceedings remain open.

49. *Id.* (citing Telecommunications Act of 1996, Pub. L. 104-104, 110 Stat. 56 (1996)).

50. See *Comcast Order*, *supra* note 6.

51. *Id.* at paras. 4-9. Actually, according to a self-conscious FCC, the decision was one part adjudication and one part rulemaking. On the one hand, it initiated this proceeding in response to a complaint filed by Free Press. On the other hand, the FCC also initiated the proceeding in response to a petition filed two weeks later by Vuze, Inc., another peer-to-peer service, that was styled as a petition for rulemaking pursuant to the April 2007 inquiry on industry practices. See *id.* at para. 11.

52. The FCC held open, public meetings at Harvard Law School in February 2008 and Stanford University in April 2008. See Anne Broache, *FCC Plans Broadband Hearing at Stanford, After All*, CNET, March 19, 2008, http://news.cnet.com/8301-10784_3-9897892-7.html.

53. *Comcast Order*, *supra* note 6, at para. 1.

meant to look as if it came from another BitTorrent peer's computer.⁵⁴ This practice, the FCC concluded, was not a reasonable network practice.⁵⁵ It gave two overlapping reasons for its finding. First, Comcast's actions stifled consumer choice and, accordingly, violated the network neutrality principles of the *Internet Policy Statement*; to wit, their blocking practices "impeded" consumers from "run[ning] applications . . . of their choice"⁵⁶ and "limited consumers' ability to access the lawful Internet content of their choice."⁵⁷ Second, Comcast's "selective interference"⁵⁸ had the effect of "discourag[ing] the 'development of technologies'"⁵⁹ whose very aim is to "maximize user control over what information is received by individuals . . . who use the Internet."⁶⁰ This practice "pose[d] a substantial threat to both the open character and efficient operation of the Internet, and [was] not reasonable."⁶¹ The FCC accordingly ordered the cable company to reformulate its broadband network management practices so that it discriminated against Internet traffic only "in a neutral and fair manner."⁶²

The FCC rejected the claim that the kind of discrimination in which Comcast was engaged was valid, citing industry transmission standards of the IETF and expert opinion.⁶³ These authorities, the FCC explained, show that, first, the Internet is meant to afford users access to the content and applications of their choice, and, second, its original engineers and programmers wanted disparately located users to be able to collaborate and comment on a common project.⁶⁴ A network of geographically dispersed microprocessor-based computers was deliberately meant to be an antidote to a cumbersome system of mainframe data processing dominated by IBM and incumbent telecommunications firms, like AT&T.⁶⁵ Comcast's practice

54. *Id.* at para. 9.

55. *Id.* at para. 1.

56. *Id.* at para. 13, 43.

57. *Id.* at 13079 (statement of Comm'r Copps).

58. *Id.* at para. 43.

59. *Id.* (quoting 47 U.S.C. § 230(b)(3)).

60. *Id.*

61. *Id.* at para. 51.

62. *Id.* at para. 26.

63. *See id.* at paras. 45-46.

64. *Id.* at 13082 (statement of Comm'r Adelstein).

65. By the 1960s, major telephone companies like AT&T had been using large mainframe computers to operate and manage their networks. For example, they used excess mainframe capacity to store messages. *See* Regulatory and Policy Problems Presented by the Interdependence of Computer and Communication Services and Facilities, *Notice of Inquiry*, 7 F.C.C.2d 11, paras. 10-16 (1967) [hereinafter *Computer I NOI*]. Remote terminal access to those mainframes enabled them to offer large-scale data processing services that they could sell at telephone rates to willing business and residential customers. *See* Robert Cannon, *The Legacy of the Federal Communications Commission's Computer Inquiries*, 55 FED. COMM. L.J. 167, 168-69 (2003). These companies cross-subsidized such services with

of distinguishing between *kinds* of packet-switched data “contravene[d] the established expectations of users and software developers for seamless and transparent communications across the Internet.”⁶⁶ While its stated objective was to ease network congestion, the practice of “deep packet inspection” and “reset injection” was insufficiently tailored to achieve that purpose as it was being used at all times of the day from neighborhood to neighborhood regardless of the prevalence of congestion.⁶⁷ There were several less-intrusive ways by which Comcast could achieve its stated objective, including, first, capping all users’ capacity at the same level or, second, simply charging for excessive use or, third, slowing connection speeds of high-capacity users regardless of which applications they use.⁶⁸ Comcast did none of these things. It, according to the FCC, blocked users’ access on the basis of application content.⁶⁹

The FCC found that Comcast’s violation was made worse by its deceitful representations to subscribers.⁷⁰ Comcast, it found, was falsely representing to its subscribers that the blocked connections had been

revenues from their monopoly line of business and, as a result, could charge low prices to keep entrants in the storage and processing markets at bay. *See* Regulatory and Policy Problems Presented by the Interdependence of Computer and Communications Services and Facilities, *Final Decision and Order*, 28 F.C.C.2d 267, paras. 21-22 (1971) [hereinafter *Computer I Final*].

In the 1960s, researchers began to develop smaller, microprocessor-based computers for application programming rather than large-scale data processing. *See* Susan P. Crawford, *Transporting Communications*, 89 B.U. L. REV. 871, 890-91 (2009). Computer programmers and engineers associated with the Defense Advanced Research Projects Agency (DARPA) in the Department of Defense started developing a geographically dispersed network of computers that could reliably transmit data between its members free from the vulnerabilities and prerogatives of mainframe owners. They were to develop a distributed computer network that could, for example, survive a catastrophic attack on, or failure of service from, a single mainframe owner. *See* Kahn & Cerf, *supra* note 23, at 18-19; ZITTRAIN, *supra* note 23, at 28; John Soma, Patrick Singer & Jeffrey Hurd, *Spam Still Pays: The Failure of the Can-Spam Act of 2003 and Proposed Legal Solutions*, 45 HARV. J. ON LEGIS. 165, 188-89 (2008) (discussing the goals of the DARPA design project, including that the “internet communication must continue despite loss of networks or gateways”); *see also* In-Sung Yoo, Note, *The Regulatory Classification of Internet Protocol Television: How the Federal Communications Commission Should Abstain from Cable Service Regulation and Promote Broadband Deployment*, 18 COMMLAW CONSPECTUS 199, 202-03 (2009) (discussing the “government effort initiated in 1973 by the Defense Advanced Research Projects Agency (“DARPA”), an agency of the United States Department of Defense, to create a series of linked computer networks capable of communicating between facilities at a distance,” which “would eventually give birth to the ARPANET government network”).

66. *Comcast Order*, *supra* note 6, at para. 45.

67. *See id.* at para. 48.

68. *Id.* at para. 49.

69. *See id.* at para. 48.

70. *See id.* at para. 52.

caused by something other than its own network management policy.⁷¹ The company's Terms of Use warned users that access would be subject to "speed and upstream and downstream rate limitations."⁷² But this language, the FCC reasoned, was too vague to be meaningful for the average user.⁷³ There is no way even the most informed user could have suspected that Comcast was discriminating against particular applications.⁷⁴ In any case, the company was not forthcoming when subscribers and groups raised questions about its network management practices.⁷⁵ And while this, for the purposes of the FCC's analysis, did not rise necessarily to the level of common-law or statutory fraud, it compounded the harm. "[A] hallmark of whether something is reasonable," the FCC explained, "is whether a provider is willing to disclose to its customers what it is doing."⁷⁶ The FCC cast this finding of misrepresentation as a kind of afterthought, but, in effect, it did more work than the FCC explicitly acknowledged. As tantalizing atmospheric background, it affected the injunctive remedy; the FCC ordered that, among other things, Comcast had to disclose the details of its revised network management practices to the FCC and the public.⁷⁷

The FCC, moreover, buttressed its misrepresentation finding by considering the likelihood that Comcast had an illicit anticompetitive motive.⁷⁸ As a video distribution model, the FCC explained, BitTorrent "poses a particular competitive threat to Comcast's video-on-demand service."⁷⁹ The cable provider's strategic decision to incorporate its video-on-demand content online through sites that compete with BitTorrent suggested as much.⁸⁰ Then-Chairman Kevin Martin, moreover, made a point of drawing out Comcast's deceitful behavior in his separate statement, writing that "Comcast's lack of disclosure about its network management practices compounded the harm. Customers that experience

71. *Id.* (pointing out that "[m]any consumers experiencing difficulty using only certain applications will not place blame on the broadband Internet access service provider, where it belongs, but rather on the applications themselves, thus further disadvantaging those applications in the marketplace," an effect which could be remedied by "disclosure of network management practices to consumers in a manner that customers of ordinary intelligence would reasonably understand").

72. *Id.* at para. 53 (quoting Comcast's Terms of Use statement).

73. *Id.*

74. *Id.*

75. *Id.*

76. *Id.*

77. *See id.* at para. 54.

78. *Id.* at 13092 ("The allegations before us boil down to a suspicion that Comcast was motivated not by a need to manage its network, but by a desire to discriminate against BitTorrent and similar technologies for anticompetitive reasons.") (statement of Comm'r Robert M. McDowell, dissenting).

79. *Id.* at para. 5 (main order).

80. *See id.*

unexpected problems with their connections may blame the connection or application. This is particularly troubling when the application is used to provide services that compete with the broadband operator's own services."⁸¹ Martin thought that the smell of anticompetitive behavior was pertinent, if not determinative, of the public disclosure remedy. Comcast's failure to be forthright about "its network management practices," he explained, could very well have been a deliberate way of disguising its misgivings about video-programming competition.⁸²

The FCC refused to pronounce a generalizable rule based on the facts before it. The "new" and "variegated" nature of broadband networks, as well as "congressional directives and Commission precedents," it explained, counseled against a "quasi-legislative promulgation of rules."⁸³ Any regulatory intervention had to be minimally intrusive. Accordingly, it refrained from imposing any fines or damages on Comcast, particularly as the cable provider purported to have not had prior notice that deep packet inspection might be illegal.⁸⁴ In any event, the FCC had worked with the parties earlier in the year to reach an agreement on appropriate network management practices.⁸⁵

2. Implications

Comcast predictably filed an appeal in which it alleged that "the [C]ommission's action was legally inappropriate and its findings were not justified by the record."⁸⁶ And there may be something to their claims. According to Robert McDowell, one of the two dissenting commissioners, the order swept too broadly, had not been subject to the appropriate administrative notice-and-comment review process suggested by inclusion in the 2007 proceedings, and, besides, was premised on "thin and conflicting" evidence of blocking.⁸⁷ "Neither the general policy goals set

81. *Id.* at 13065 (statement of Chairman Kevin J. Martin).

82. *Id.* at para. 53 ("If Comcast actually believed its practices were reasonable, it should not have behaved in this manner. A hallmark of whether something is reasonable is whether a provider is willing to disclose to its customers what it is doing.") (main order).

83. *See id.* at paras. 29-32.

84. *See id.* at paras. 33-34.

85. *See generally* Ann Broache, *Comcast and BitTorrent Agree to 'Collaborate'*, CNET, Mar. 27, 2008, http://news.cnet.com/8301-10784_3-9904494-7.html. *See also* Comcast, *supra* note 33, at 13085 (statement of Comm'r Deborah Taylor Tate).

86. *Comcast to appeal decision on peer-to-peer Net connections*, PITTSBURGH BUS. TIMES, Sept. 5, 2008, <http://www.bizjournals.com/pittsburgh/stories/2008/09/01/daily31.html>. The Panel on Multijurisdiction Litigation awarded the Comcast-BitTorrent Appeal to the D.C. Circuit, which was argued in January 2010. *Comcast Corp. v. FCC*, 579 F.3d 1 (D.C. Cir. 2009).

87. *See Comcast Order*, *supra* note 6, at 13091-92 (statement of Comm'r Robert M. McDowell, dissenting). Commissioner Deborah Tate concurred with Commissioner McDowell's statement, adding a concern about "online child pornography and unauthorized

forth in sections 230 and 706 of the Act” nor various other sections invoked by the majority, he argued, confer any authority on the FCC to rule on the legality of Comcast’s management practices.⁸⁸ The practical effect of the FCC’s action, McDowell averred, is to usurp the role of industry engineers in making decisions about how to efficiently manage the networks for which they are responsible.⁸⁹

As a matter of policy, legal scholars also have expressed reservations about the substantive aspects of the decision. The decision, according to Kevin Werbach and Philip Weiser, for example, failed to give substantive guidance on what “reasonable network management” entails.⁹⁰ It only announced what Comcast could not do and ignored “the potential for leveraging standards” in a more comprehensive way.⁹¹ On the basis of an underdeveloped factual record, Werbach continues, the FCC has effectively discouraged (peer-to-peer) application developers and broadband service providers from voluntarily entering into innovative private arrangements among themselves when the cable industry, in particular, is searching for more efficient transmission technologies for their own service offerings.⁹² This, he concludes, is bad for users.⁹³

Even at this early stage, however, the *Comcast* order appears to be a watershed decision in contemporary communications law. For the first time since the commercial deployment of the Internet in the early 1990s, federal policymakers have imposed affirmative obligations on a broadband network owner in a public proceeding. The FCC, to be clear, had imposed nondiscrimination obligations on broadband network owners before.⁹⁴ But those were in private settlements and merger agreements with limited

illegal downloads of creative content.” *Id.* at 13086 (statement of Comm’r Deborah Taylor Tate, statement). *See also* Weiser, *supra* note 2.

88. *Comcast Order*, *supra* note 6 at 13090 (statement of Comm’r Robert M. McDowell, dissenting).

89. *See id.* at 13092-93.

90. *See* Weiser, *supra* note 2, at 576; Werbach, *supra* note 2.

91. Werbach, *supra* note 2, at 218.

92. *Id.* at 219; Weiser, *supra* note 2, at 575.

93. *See* Werbach, *supra* note 2, at 220.

94. *Compare* SBC Communications Inc. and AT&T Corp. Applications for Approval of Transfer of Control, *Memorandum Opinion and Order*, 20 F.C.C.R. 18290, para. 211 (2005) (conditioning merger agreement on, inter alia, network neutrality requirements); *and* Verizon Commc’ns Inc. and MCI, Inc. Applications for Approval of Transfer of Control, *Memorandum Opinion and Order*, 20 F.C.C.R. 18433, para. 221 (2005) (conditioning merger agreement on, inter alia, network neutrality requirements); *with* Madison River Commc’ns, LLC and affiliated companies, *Order*, 20 F.C.C.R. 4295, para. 5 (2005) (forbidding telecommunications provider by consent decree from blocking broadband voice service competitors from using its facilities to reach customers).

precedential effect.⁹⁵ Here, the FCC effectively held that it is against public policy, first, to interfere with users' ability to choose applications and, second, to stifle innovation on the Internet. And, notwithstanding its ostensible circumspection, the *Comcast* decision already has made an impact. Major network owners today are second guessing all efforts to moderate network traffic on the basis of customers' applications or bandwidth use.⁹⁶ It also has helped to elevate nondiscrimination principles to the status of cause célèbre. The election of President Barack Obama, moreover, has provided solace to nondiscrimination advocates. His appointments to the FCC, the FTC, and the Department of Justice strongly suggest that, for at least the next three years, the federal government will be more active in regulation and enforcement in the area.⁹⁷ This bodes well for recent complaints about AT&T and Apple's attempt to block Skype and Google Voice use on the iPhone.⁹⁸ Congress, too, is getting into the act. It included a nondiscrimination provision in pertinent provisions of the recent American Recovery and Reinvestment Act (Recovery Act).⁹⁹ At any rate, activists have successfully marshaled public opinion in their favor, effectively forcing Time Warner recently to temporarily discontinue its tests of a consumption-based metered pricing.¹⁰⁰

95. *But see* Cheryl Bolen, *Net Neutrality Concession by AT&T Sets Key Precedent, Proponents Argue*, TELECOMM. MONITOR, Jan. 3, 2007 (discussing FCC's approval of AT&T and BellSouth merger).

96. *See* Matthew Lasar, *Reactions to FCC's Comcast Decision Come Fast and Furious*, ARS TECHNICA, Aug. 1, 2008, <http://arstechnica.com/old/content/2008/08/reactions-to-fccs-comcast-spanking-come-fast-and-furious.ars> (last visited Feb. 23, 2010).

97. The newly appointed Chairperson of the FTC, for example, has hinted that he will initiate enforcement actions to ensure companies engage in reasonable network management practices. *See* John Timmer, *FTC Chair: We May Jump into Net Neutrality Fray*, ARS TECHNICA, May 11, 2009, <http://arstechnica.com/tech-policy/news/2009/05/ftc-chair-promises-aggressive-approach-to-spyware.ars> (last visited Feb. 23, 2010).

98. *See* Amy Schatz, *Group Prods FCC to Defend Skype on iPhone*, WALL ST. J., April 3, 2009, <http://online.wsj.com/article/SB123876873806886721.html#>; Posting of Jason Kincaid to TechCrunch, <http://www.techcrunch.com/2009/07/31/fcc-takes-on-apple-and-att-over-google-voice-rejection/> (July 31, 2009).

99. American Recovery and Reinvestment Act of 2009 § 601(j), Pub. L. No. 111-5

Concurrent with the issuance of the Request for Proposal for grant applications pursuant to this section, the Assistant Secretary shall, in coordination with the Commission, publish the non-discrimination and network interconnection obligations that shall be contractual conditions of grants awarded under this section, including, at a minimum, adherence to the principles contained in the Commission's broadband policy statement (FCC 05-15, adopted August 5, 2005).

100. Posting by Cecilia Kang to Post I.T., http://voices.washingtonpost.com/post-it/2009/04/time_warner_stops_pay-as-use_i.html (Apr. 16, 2009, 16:37 EST). Despite the public relations victory by activists, Time Warner has since included metering and usage caps in its terms of service for subscribers. Andrew Feinberg, *Time Warner Changes to Terms of Service Could Allow Metering, Tiers*, BROADBANDCENSUS.COM, June 1, 2009, <http://broadbandcensus.com/2009/06/time-warner-changes-to-terms-of-service-could-allow-metering-tiers/> (last visited Feb. 23, 2010).

Nondiscrimination advocates nevertheless remain concerned. Rapid commercialization of the physical infrastructure of the Internet, they fear, will undermine the values of the open network design.¹⁰¹ Before, they argue, the Internet's intelligence was held in common by its geographically dispersed users so that the mandates of regulators and network owners could not control it.¹⁰² Today, large network owners, like Comcast, AT&T, and Time Warner, have taken up powerful gatekeeping positions in the market and are not so taken by the Internet's storied open network design.¹⁰³ Competition makes them eager to implement proprietary business models that charge a premium for bandwidth-heavy applications and content.¹⁰⁴ Firms that specialize in content delivery, like Akamai, are using their substantial inventory of network servers to bypass points of congestion on the "public" Internet by offering, among other things, storage and "caching" services for a price to Internet-related services, like Google, so that the latter may provide speedier and more reliable service to their respective users.¹⁰⁵ Network neutrality advocates are hoping that, at a minimum, policymakers forbid selective discrimination against unaffiliated applications and content.¹⁰⁶

C. *The Technological Approach as Regulatory Governance*

Broadband policy continues to lack positive regulatory direction if all it means after *Comcast* is that the FCC will defer on a case-by-case basis to the transmission standards and protocols articulated by the current membership of the IETF. The *Internet Policy Statement* was an FCC action that, until *Comcast*, a majority of commissioners appeared to think was

101. See, e.g., Brett Frischmann, *Privatization and Commercialization of the Internet Infrastructure: Rethinking Market Intervention into Government and Government Intervention into the Market*, 2 COLUM. SCI. & TECH. L. REV. 1, 54 (2001) ("Privatization of the interconnection infrastructure is analogous to giving away an overly broad intellectual property right in that market actors gain control over an essential input into many downstream goods.").

102. See *id.* at 38 (arguing that "a fully privatized and commercialized Internet will likely move away from the end-to-end principle towards technologically fenced-off networks," a model that allows provisional control by the market actors).

103. See, e.g., Werbach, *supra* note 10, at 371 (discussing the powerful positions of "dominant Internet backbones" such as AT&T, Verizon, and Comcast).

104. See Barbara van Schewick, *Towards an Economic Framework for Network Neutrality Regulation*, 5 J. ON TELECOMM. & HIGH TECH. L. 329, 369-70 (2007).

105. Christopher S. Yoo, *Network Neutrality and the Economics of Congestion*, 94 GEO. L. J. 1847, 1882 (2006) (discussing the process by which content delivery firms "may redirect the request to a particular cache that is . . . less congested" and noting that Akamai "maintains more than fourteen thousand servers and handles more than fifteen percent of the world's web content").

106. Tim Wu, *Network Neutrality, Broadband Discrimination*, 2 J. TELECOMM. & HIGH TECH. L. 141, 165-70 (proposing a regulation scheme that would allow broadband operators to police what they own but would forbid broadband discrimination).

short of enforceable.¹⁰⁷ The suggestion of anticompetitive motive in the decision, moreover, was not dispositive one way or another as there are no specific nondiscrimination provisions in the Communications Act to apply to broadband service providers.¹⁰⁸ The law governing the provision of wireline broadband service after *Comcast*, therefore, continues to amount to little more than a policy of administrative deference to engineers, programmers, and entrepreneurs—not positive law per se.

This is no surprise. This policy reflects the progressive norms to which the celebrated architects of the Internet were self-consciously committed. These pioneers did not just want to avoid the structural prerogatives of centralized transmission infrastructure owners when they designed networked computing systems for geographically dispersed users. They wanted to circumvent centralized government control of technical administration as well. By the mid- to late-1990s, however, the normative commitment to open network design assumed a life of its own as its constitutive engineering priorities—to wit, decentralization, interoperability, and user sovereignty—acquired a romantically libertarian aura.¹⁰⁹ And by the end of the 1990s, legal scholars were pronouncing that the pioneers of the Internet's open network design had discovered a transformative new architecture for the democratic creation and distribution of ideas and data.¹¹⁰ The Internet does not just consist of innovative transmission protocols, they argued; it is a sovereign and effectively unregulable space.¹¹¹ As such, these triumphalists argued, it is a model for how to structure democratic deliberation and cooperation without the supporting hand of government.¹¹²

107. Richard S. Whitt, *Evolving Broadband Policy: Taking Adaptive Stances to Foster Optimal Internet Platforms*, 17 *COMMLAW CONSPECTUS* 417, 505-06 (2009) (stating that when the Internet Policy Statement was announced in September 2005, the FCC “indicated it was an unenforceable non-binding document”).

108. See Communications Act of 1934, 47 U.S.C. § 151 et seq.

109. See, e.g., E-mail from John Perry Barlow, A Declaration of the Independence of Cyberspace, Cognitive Dissonance, Co-founder, Electronic Frontier Found. (Feb. 9, 1996, 17:16:35 CST), available at http://w2.eff.org/Censorship/Internet_censorship_bills/barlow_0296.declaration (“Governments of the Industrial World, you weary giants of flesh and steel, I come from Cyberspace, the new home of Mind. . . . You are not welcome among us. You have no sovereignty where we gather.”). See also RICK LEVINE ET AL., *THE CLUETRAIN MANIFESTO: THE END OF BUSINESS AS USUAL* (2001).

110. See, e.g., Lewis A. Friedland, *Electronic Democracy and the New Citizenship*, 18 *MEDIA, CULTURE & SOCIETY* 185-212 (1996) (pronouncing that the technology of the Internet “connotes a radically new form of democratic practice modified by new information technologies”).

111. See generally David R. Johnson & David Post, *Law and Borders—the Rise of Law in Cyberspace*, 48 *STAN. L. REV.* 1367 (1996) (discussing the concept of cyberspace as a new and independent space and arguing that existing regulation schemes are inapplicable).

112. See *id.* at 1397-99 (arguing that the same concepts underlying the self-governance of Cyberspace are applicable to the governance structures of sovereign states).

1. Programming Code Acting as Law

Among the more prominent versions of this view was articulated by Joel Reidenberg in a 1998 piece in which he argued that the rules promulgated implicitly in system design compete with and sometimes supplant “law and government regulation.”¹¹³ Through what he called a “*Lex Informatica*,” programmers generally prescribe application designs ex ante that effectively determine subsequent user actions.¹¹⁴ As a matter of convention, however, programmers also afford users the flexibility to customize around those default design preferences.¹¹⁵ But traditional regulatory approaches, Reidenberg continued, do not afford users this kind of flexibility on the belief that important policy goals would otherwise be left unfulfilled.¹¹⁶ *Lex Informatica*, meanwhile, may advance information policy goals like content regulation, privacy protection, and intellectual property protection.¹¹⁷ Reidenberg accordingly argued that, if policymakers are going to govern the Internet in a sustainable way, they should begin by accommodating users’ autonomous ability to implement protective measures rather than paternalistically proscribe inflexible rules that are often difficult to enforce on the Internet anyway.¹¹⁸ Of course, he explained, traditional regulatory measures can be useful; they can, among other things, impose liability on various network actors for failure to implement flexible application designs, immunize the implementation of such rules, or sanction users’ circumvention of designers’ application strictures.¹¹⁹ A technological approach, he argued, would at least

113. Joel R. Reidenberg, *Lex Informatica: The Formulation of Information Policy Rules Through Technology*, 76 TEX. L. REV. 553, 554-55 (1998) (“[L]aw and government regulation are not the only source of rule-making. Technological capabilities and system design choices impose rules on participants. The creation and implementation of information policy are embedded in network designs and standards as well as in system configurations.”).

114. *See id.* at 572-73.

115. *Id.* at 571. For example, at the time Reidenberg was writing, some popular Internet browsers recorded Web traffic patterns “for the collection of personal data” that, in the end, users could always override “by altering file attributes or by disabling the log feature.” *Id.*

116. *Id.* at 555-56.

The characteristics of *Lex Informatica* provide ways to accommodate different national public policies for controversial problems, such as content restrictions, the treatment of personal information, and the protection of intellectual property circulating on transnational networks. As a consequence, policymakers can and should look to *Lex Informatica* as a useful extra-legal instrument that may be used to achieve objectives that otherwise challenge conventional laws and attempts by governments to regulate across jurisdictional lines.

117. *Id.* at 577. Application designers, for example, afford users the option of changing default settings to protect private personal information from unauthorized access by third parties. *See id.* at 574.

118. *See id.* at 556.

119. *Id.* at 583.

acknowledge that command-and-control rulemaking is inconsistent with and sometimes even superseded by the conventions already at work between users, applications, and service providers on the Internet.¹²⁰

Lawrence Lessig generally agreed.¹²¹ He argued that the Internet's open network design is one of at least four autonomous means of social control.¹²² This is to say that the Internet's architectural design or "code" is not unlike highway lane design or public school architecture; it determines behavior just as, and sometimes more, effectively as government-promulgated law.¹²³ Its determinative power depends on the contexts in which it is deployed and the behaviors it seeks to proscribe or encourage.¹²⁴ In the case of the Internet, Lessig explained, code is generally the most effective agent of regulation.¹²⁵ The power of government-promulgated law to moderate or proscribe behavior on the Internet through, for example, ex ante legislation or ex post court orders, diminishes with every additional user.

2. Self-Regulatory Organizations Acting as Lawgivers

In 2003, A. Michael Froomkin advanced as forceful an argument as anyone on why the extralegal decision-making methods of the IETF, in particular, are superior to any other governmental or nongovernmental processes for setting transmission standards, protocols, and policy. The standard-setting body's deliberative, consensus-driven rulemaking processes, he argued, exemplify the best practical discourse championed by critical theorist Jürgen Habermas; all participants get a hearing, hear all of the best arguments, and are moved (i.e., not coerced) to agree with only the

120. *Id.* at 579-584. In 2005, Reidenberg amended his argument to address attempts by what he called "Internet separatists" to avoid the application of jurisdiction and enforcement authority by sovereign states anywhere and, thereby, posing a "stark challenge to public order rules." Joel R. Reidenberg, *Technology and Internet Jurisdiction*, 153 U. PA. L. REV. 1951, 1958 (2005).

The Internet attack on state jurisdiction advocates an important technological determinism that is problematic for the relationship between law and technology. . . . Sovereign states, however, have an obligation to protect their citizens and to assure that technologies empower rules of law rather than undermine the protection of citizens.

Id. at 1969. See also JACK GOLDSMITH & TIM WU, WHO CONTROLS THE INTERNET?: ILLUSIONS OF A BORDERLESS WORLD (2006).

121. See Lawrence Lessig, *The Law of the Horse: What Cyberlaw Might Teach*, 113 HARV. L. REV. 501 (1999).

122. See *id.* at 507. The other three are law, social norms, and markets. *Id.*

123. See *id.* at 510-11.

124. *Id.* at 513-14. This is not to say that the four modalities of regulation do not interact. *Id.* at 511. Regulators might appropriately attempt different combinations of the four in differing settings. But, Lessig explained, these modalities also conflict. See *id.* at 510-11.

125. *Id.* at 530-31.

most compelling points.¹²⁶ Froomkin went further than those who have argued that the FCC should serve more as a “norm entrepreneur” and enforcement agency than a substantive technological rulemaking one.¹²⁷ The IETF’s self-reflective decision-making processes, he argued, make it well-suited to adjudicate technical matters as well as those that have direct social consequences, including, for example, privacy protections against wiretapping.¹²⁸ The IETF, he explained, is characterized by the “basic and self-conscious guiding normative commitments to the value of communication and to the emancipatory potential of communication.”¹²⁹ The only obligation government has, Froomkin explained, is to keep service cheap so that cost is not a barrier to access and to “stay out of the way and eschew censorship or access control to allow everyone the greatest freedom to participate in global discourse.”¹³⁰ Government need only let the applications that have made the Internet an exciting space for communicative action—namely, blogging, wikis, community-based forums with collaborative filtering, and e-government initiatives—flourish.¹³¹

Theories in administrative law on “co-regulation”—that is, the formal delegation of rulemaking to nongovernmental standard-setting organizations—provides legal heft to this version of the technological approach.¹³² Nongovernment actors, Froomkin argued, can play productive roles in all stages of the regulatory process.¹³³ Co-regulatory administrative regimes take the lesson from public-choice theory that firms, elected officials, and regulators bring their own self-interests to bear in the process of lawmaking.¹³⁴ They do this in ways that are simply not accounted for under traditional command-and-control regimes by, among other things, incorporating all stakeholders systematically in policymaking.¹³⁵ This can make the administrative process more efficacious, responsive, and legitimate.¹³⁶ Private self-regulatory organizations, Froomkin argued, are constrained by their own procedural rules, contract terms, market pressures,

126. See Froomkin, *supra* note 4, at 799-801 (citing JÜRGEN HABERMAS, *JUSTIFICATION AND APPLICATION: REMARKS ON DISCOURSE ETHICS* 163-64 (Ciaran Cronin trans., 1993)).

127. Weiser, *supra* note 2, at 570.

128. Froomkin, *supra* note 4, at 809-10.

129. *Id.* at 810.

130. *Id.* at 811.

131. See *id.* at 858-71.

132. Jody Freeman, *Private Parties, Public Functions and the New Administrative Law*, 52 ADMIN L. REV. 813, 835 (2000)).

133. See Froomkin, *supra* note 4, at 755-757.

134. See Freeman, *supra* note 132, at 844-845.

135. *Id.* at 843-44 (challenging the public-choice claim that regulation is nothing more than “the product of deal-making between private actors able to provide rewards to bureaucrats motivated by personal gain”).

136. See *id.* at 819.

third-party oversight, and the possibility of FCC enforcement action.¹³⁷ Regimes of co-regulation like these may be better able to advance the central substantive aims of policy.

Writing in this vein, prominent Internet and communications law scholars today argue that the FCC should be more responsible for developing standards in conjunction with self-regulating organizations than solely a command-and-control rule factory.¹³⁸ Philip Weiser, one of the most articulate proponents of co-regulation in the context of Internet policymaking, recently took up the example of the *Comcast* decision to propose an Internet governance scheme that would effectively confer the force of law on the extralegal decision-making processes of self-regulatory organizations like the IETF.¹³⁹ He lauds the FCC's decision in *Comcast* to impose regulatory obligations on broadband service providers, but asserts that a self-regulatory organization like the IETF could have resolved the dispute in the first instance (allowing for appeals to the FCC) and avoided the costs and uncertainty associated with protracted FCC litigation.¹⁴⁰

Weiser argues for a regime that effectively displaces the traditional command and control of the FCC for one that is shared between the agency and the IETF or some equally respected self-regulatory organization.¹⁴¹ The latter, he writes, has resources, technical expertise, and flexibility that the FCC simply lacks.¹⁴² The FCC, in Weiser's proposed arrangement, would be limited to promulgating "basic norms" and engaging in oversight and enforcement.¹⁴³ The IETF, on the other hand, would specify and implement the legal norms on a routine, case-specific basis.¹⁴⁴ The challenges of facilitating cooperation among the various parties (i.e., application developers, network owners, online content producers), Weiser explains, are best met by institutional mechanisms that "assure all parties the opportunity to deal fairly with one another."¹⁴⁵ With trust, regulators could achieve a stable equilibrium for end users, application developers, and broadband service providers.¹⁴⁶ This means that participants will have to engage in extensive information sharing and cooperation, and also agree to

137. *See id.*

138. *See, e.g.,* Weiser, *supra* note 2, at 553; Werbach, *supra* note 2, at 208.

139. *See* Weiser, *supra* note 2, at 569, 583.

140. *Id.* at 582-590.

141. *Id.* at 590.

142. *Id.* at 583. *See also* Freeman, *supra* note 132, at 836 ("Private industry has an enormous information advantage over public agencies. . . . Agencies simply lack the resources necessary to do independent research about, properly inspect, and successfully pursue regulated interests that violate regulations.").

143. *See* Weiser *supra* note 2, at 552.

144. *Id.* at 570.

145. *Id.*

146. *Id.* at 538.

subject their disagreements to arbitrations conducted under the auspices of the IETF or an appropriate self-regulatory organization.¹⁴⁷ The FCC would only enter into the controversy on an enforcement basis after rules have been established by the group rather than enter into an *ex ante* rulemaking process as it has traditionally employed.¹⁴⁸ Such an institutional arrangement would, first, help to lessen the inefficiencies associated with rent seeking, relitigation, and other strategic behavior.¹⁴⁹ Second, as it would be managed by industry practitioners, the standard-setting process would be eminently adaptable to the dynamism of Internet entrepreneurship today.

D. Regulatory Deference as Regulatory Incapacity

These important contributions to legal scholarship in communications policy and governance put the *Comcast* decision into proper perspective. They make plain that, by imposing nondiscrimination obligations on Comcast, the FCC ratified the earliest conception of Internet governance four decades ago.¹⁵⁰ The FCC relied on a long-standing inclination among policymakers to defer on substance to the entrepreneurial savvy and technical expertise of practitioners in the field.¹⁵¹ The decision simply affirmed that industry engineering standards and best practices ought to guide policymaking.

Certainly by the late 1990s, the notion that code- and industry-promulgated transmission protocols control behavior on the Internet in ways that supersede government-promulgated law justified a policy of minimal interference.¹⁵² Congress memorialized this approach in

147. *Id.* at 571.

148. According to a similar formulation by Kevin Werbach, the FCC would certify standards developed and voluntarily entered into by the relevant Internet-related companies. The FCC would intervene in the event that “private efforts fail to benefit users or the market as whole.” Werbach, *supra* note 2, at 208.

149. *See* Weiser, *supra* note 2, at 542, 549.

150. *See Comcast Order, supra* note 6; *see also* MILTON L. MUELLER, *RULING THE ROOT: INTERNET GOVERNANCE AND THE TAMING OF CYBERSPACE* 75 (2002) (“The demand for research on internetworking followed quickly on ARPANET’s heels. By 1973 the military agency, now named DARPA, was supporting two other packet-based networks The military wanted to retain the advantages of specialized networks, but it wanted universal communication among them. It needed an internet working protocol.”)

151. *See Comcast Order, supra* note 6, at paras. 41-51. (“For all of the foregoing reasons, it is our expert judgment that Comcast’s practices do not constitute reasonable network management, a judgment that is generally confirmed by experts in the field.”)

152. LAWRENCE LESSIG, *CODE AND OTHER LAWS OF CYBERSPACE* 207 (1999) (“The shift is away from the power of government to regulate, and toward the power of individuals to escape government regulation. Effective regulation then shifts from lawmakers to code writers.”)

substantial part in the 1996 Telecommunications Act.¹⁵³ There, legislators overtly left the development of broadband service to the entrepreneurs, engineers, and users already at work.¹⁵⁴ Such an approach, after all, had proven wildly successful in the preceding decades. Most other aspects of telecommunications regulation covered by the Act, on the other hand, would remain subject to an elaborate licensure regime.

And, in fact, many extant regulations accommodate user- and developer-initiated technological measures as appropriate.¹⁵⁵ In the prefatory provision of Section 230,¹⁵⁶ for example, Congress asserted that the Internet affords “a forum for a true diversity of political discourse, unique opportunities for cultural development, and myriad avenues for intellectual activity.”¹⁵⁷ The “policy of the United States,” therefore, would be to “promote the continued development of the Internet”¹⁵⁸ generally “unfettered” by government regulation.¹⁵⁹ In Section 230(c), moreover, Congress included a safe-harbor provision that immunizes “interactive computer service” providers from liability so long as they are not materially involved in violations of criminal, intellectual property, and privacy law.¹⁶⁰ Through this provision, Congress meant to avoid the perverse result of imposing liability on online intermediary services that actually make an effort to filter out unlawful or otherwise illicit user content.

These provisions, no matter how ostensibly anodyne, were significant reforms of U.S. communications policy because they inverted the approach enshrined in the original 1934 Act. For most of the twentieth century, policymakers conceived of media consumers as an undifferentiated mass-

153. *See* Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (1996) (codified at various sections of 47 U.S.C.).

154. *Id.* at 47 U.S.C. § 257.

155. *See, e.g.*, Title II of the Digital Millennium Copyright Act, Pub. L. No. 105-304, 112 Stat. 2877 (1998) (codified at 17 U.S.C. § 512); *see also* Title V of the Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56.

156. Communications Decency Act of 1996, Pub. L. No. 104-104, § 509, 110 Stat. 137 (codified at 47 U.S.C. § 230). Unlike the rest of the Telecommunications Act, legislators included the CDA as Title V either during “executive committee after the hearings were concluded or as amendments offered during floor debate.” *Reno v. ACLU*, 521 U.S. 844, 858 (1997). This occurred after no meaningful fact finding at the committee level.

157. 47 U.S.C. § 230(a)(3) (2006).

158. *Id.* § 230(b)(1).

159. *Id.* § 230(b)(2).

160. *Id.* § 230(c)-(e); *see, e.g.*, Chicago Lawyers’ Comm. for Civil Rights Under Law, *Inc. v. Craigslist, Inc.*, 519 F.3d 666 (7th Cir. 2008); *Zeran v. Am. Online, Inc.*, 129 F.3d 327, 328 (4th Cir. 1997).

consuming public.¹⁶¹ Media companies, broadcast programmers, and advertisers appealed to the lowest common denominator in order to appeal to the widest possible audience.¹⁶² The 1996 provisions reversed course by reconceptualizing consumers as autonomous and individuated users and producers.¹⁶³ This new regime would seek to protect users' choices and no longer pretend to approximate their interests.¹⁶⁴

Manifest as it now is in federal law, the argument for a technological approach evidently does more work than its proponents perhaps knew to admit. Its allure, first of all, is that it ostensibly is insulated from all the dirty vagaries of regulatory capture. To the extent commons code is the prevailing design architecture, Reidenberg and Lessig argued, there is no need for governmental intervention because the rules and protocols of open network design already encourage cooperation and social sharing.¹⁶⁵ Besides, according to Froomkin, the decision-making processes of the standard-setting body responsible for developing Internet policies and transmission protocols meet the highest standards of discourse ethics in ways that other governmental and nongovernmental processes simply do not. Second, the technological approach conflates the casual exploits of generic users with the entrepreneurial ingenuity, resourcefulness, and autonomy of a handful of innovators. It ornaments even the most unwitting Internet "consumer" with the hipper and more dynamic moniker of "user."

But we are a far cry from the time when the "early participants were graduate students who tended to know each other, shared a common professional socialization, and were relatively equal in (low) status."¹⁶⁶ Both implicit assumptions of the technological approach are untenable in

161. *See generally* Telecommunications Act of 1934, Pub L. No. 416, 48 Stat. 1064 (codified as amended in scattered sections of 47 U.S.C.) (referring throughout to "the public" as a singular object).

162. BENKLER, *supra* note 18, at 205; ROBERT WATERMAN MCCHESENEY & JOHN NICHOLS, *OUR MEDIA, NOT THEIRS: THE DEMOCRATIC STRUGGLE AGAINST CORPORATE MEDIA* 52-3 (2002). The Internet is quite unlike the fare that network broadcasters traded in for most of the twentieth century. Internet use is far more purposeful and interactive. It demands a minimum amount of physical and psychic engagement that radio listening and television watching simply do not. *See, e.g.*, Henry Jenkins et al., MACARTHUR FOUNDATION, *Confronting the Challenges of a Participatory Culture: Media Education for the 21st Century* 20-21 (2006), available at http://digitalllearning.macfound.org/atf/cf/%7B7E45C7E0-A3E0-4B89AC9CE807E1B0AE4E%7D/JENKINS_WHITE_PAPER.PDF. Never mind mastering the sleek devices that afford online access. *See, e.g.*, Virginia Heffernan, *I Hate My iPhone*, *THE MEDIUM*, Apr. 5, 2009, at 19.

163. *See* Michael K. Powell, *Preserving Internet Freedom: Guiding Principles for the Industry*, 3 *J. ON TELECOMM. & HIGH TECH. L.* 5, 7 (2004).

164. *See, e.g.*, RAYMOND WILLIAMS, *CULTURE AND SOCIETY: 1780-1950*, 300 (1983) (observing that "[t]here are in fact no masses; there are only ways of seeing people as masses").

165. *See supra* notes 120-21 and accompanying text.

166. Froomkin, *supra* note 4, at 782.

the contemporary political economy of the broadband consumer market for two reasons. First, they give too much credit to all the network owners, entrepreneurs, programmers, and casual users engaging the Internet today who, in the name of their own bottom line, are, in fact, indifferent or even hostile to flexible use or social sharing conventions. User consensus today cannot be achieved in a university café or graduate student suite. Just consider the managers and engineers at Comcast who developed and implemented the 2007 deep packet inspection policy. Assuming the FCC's findings are true—and there is no reason to believe they are not on this point—Comcast was overtly misleading its subscribers and deliberately targeting peer-to-peer sharing applications for the sake of their own bottom line. Second, the majority of users are not autonomously capable either of choosing to adhere to common communications standards or equally contributing to the development of nongovernmental standards and application designs.¹⁶⁷ Customers of broadband service are not even remotely equally situated as network owners or application developers.

Of course, deference, on the other hand, presupposes this uneven distribution of technical expertise. After all, it posits, only a vanguard of experts versed in the Internet's most technical aspects ought to be responsible for adjudicating disputes among stakeholders in the first instance. No other institutions, the argument goes, are as well positioned (or should be expected to be in such a position) to address broadband network management practices, for example. Moreover, a properly supervised regime of co-regulation could remove some of the strategic behavior that drags on the efficiency of the administrative process.

The Internet of today is nevertheless too public a medium to be treated as a boutique specialization. There are no enforceable assurances that the standard setters at the IETF, for example, meaningfully integrate the various interests of less technologically savvy constituencies into their decisions. This becomes pertinent in circumstances touching on overtly commercial and otherwise personal uses of the Internet, as well as those that are more public in nature—like law enforcement and national security. Notwithstanding their relative lack of expertise in Internet engineering and application design, too many users today have too much at stake to justify delegation of all Internet-related questions to a private self-regulatory organization. The only advantage gained by such an arrangement is a detour around decision-making processes addressed to the public. The FCC nevertheless made plain most recently in *Comcast* that, even in that case, it does not have its own logic for what reasonable network management

167. See, e.g., Reidenberg, *supra* note 113, at 586 (discussing the importance of understanding rapidly changing technological developments in order to develop proper regulatory standards).

practices are absent those suggested by IETF standards.¹⁶⁸ The decision, therefore, was, at best, an act of modesty bespeaking the FCC's lack of institutional competence on the questions at issue. But even then, it deserted the possibility that it has any normative expertise worth advancing notwithstanding their explicit duties under the Communications Act.¹⁶⁹ The decision was an act of incapacity just when broadband policy requires more. At a minimum, there was nothing about the reasonableness inquiry at the core of the case that required deference to engineering standards.¹⁷⁰

The argument for co-regulation and delegation of rulemaking to nongovernmental bodies is of a piece with another preoccupation among communications policymakers: liberal economic theory and its celebrated assumption that unimpeded market competition is generally the most efficient and objective adjudicator of contests between market actors.¹⁷¹ The most prominent legal scholars writing in the area have framed broadband policy, and network management policy in particular, in the terms of competition, efficiency, and economic growth.¹⁷² Technological concerns over decentralization, interoperability, and user sovereignty morph into and are usurped by economic concerns over antitrust, nondiscrimination, and consumer welfare. So, before offering in Part IV an alternative to the technological approach, Part III will analyze Internet policymakers' preoccupation with liberal economic theory.

III. THE ECONOMIC APPROACHES TO BROADBAND POLICYMAKING

Policymakers and scholars of broadband service take for granted that healthy competition in the communications market will deliver low prices, broad deployment, innovation, and good quality of service.¹⁷³ Interconnection and nondiscrimination requirements on facilities-based wireline service providers in particular have been the presumptive regulatory mechanisms for ensuring that the retail market remains

168. *Comcast Order*, *supra* note 6, at para. 45 (measuring Comcast's network management practices against the reasonableness standards promulgated by the IETF).

169. *Id.* at 13067 (statement of Chairman Kevin J. Martin) (discussing the Commission's strategy to resolve individual complaints as opposed to setting industry standards).

170. *Id.* at 13091-92 (Comm'r Robert M. McDowell, dissenting) (pointing out that the Commission nearly applied a strict scrutiny type standard).

171. *See generally* Baird, *supra* note 4 (arguing that government should be reluctant to intervene in an industry that is best regulated by market activity).

172. *See, e.g.*, Whitt, *supra* note 107, at 417-19.

173. Robert D. Atkinson, *The Role of Competition in a National Broadband Policy*, 7 J. ON TELECOMM & HIGH TECH. L. 1, 2 (2009); *see, e.g.*, JONATHAN E. NUECHTERLEIN & PHILIP J. WEISER, *DIGITAL CROSSROADS: AMERICAN TELECOMMUNICATIONS POLICY IN THE INTERNET AGE* 5-10 (2007).

competitive.¹⁷⁴ Policymakers also have imposed common carrier nondiscrimination obligations to restrain network owners from unfairly leveraging their gatekeeping positions against unaffiliated companies.¹⁷⁵ Through rules requiring them to interconnect with competitors, Congress and the FCC have sought to restrain incumbents' ability to cross-subsidize affiliated ventures in emergent secondary markets with revenues from reliable, monopoly lines of business.¹⁷⁶ Without these requirements, the reasoning goes, incumbents would erect onerous barriers to entry for emergent competitors, stunting innovation.¹⁷⁷

Since the 1950s, for example, the federal government has forbidden large telecommunications service providers from discriminating against unaffiliated equipment manufacturers by effectively giving subscribers the right to attach and use whichever devices they want without undermining the physical integrity of the telephone network.¹⁷⁸ Telephone service providers must allow subscribers to interconnect any devices that meet objective minimum quality standards.¹⁷⁹ This rule was a major turning point, paving the way for network attachment regulations in 1975, which, in turn, paved the way for fax machines, answering machines, and modems.¹⁸⁰

174. U.S. Gen. Accounting Office, *Telecommunications: Technological and Regulatory Factors Affecting Consumer Choice of Internet Providers*, GAO-01093, at 55 (2000) ("In addition to their definitional arguments for open access, proponents also contend that the Internet is based on open, nondiscriminatory protocols and that the cable industry model of selling a bundled ISP violates the inherent openness and competitiveness of the Internet.")

175. See, e.g., Crawford, *supra* note 65, at 882.

176. See *id.* at 896.

The Commission created some new terms and rules ("comparably efficient interconnection" and "open network architecture") to govern unbundling. This allowed AT&T into the "information service" business and, dangerously, attempted to provide in words how AT&T should make its transport facilities open to competitors while also becoming an information service provider itself. But the essential basic/other (or transport/telecommunications services versus "information services"/"enhanced services") dichotomy remained in place.

177. See, e.g., Eli Noam, *Beyond Liberalization II: The Impending Doom of Common Carriage*, 18 TELECOMM. POL'Y 435, 441 (1994).

178. For example, AT&T prevented subscribers from attaching any devices that AT&T had not approved. The ostensible logic of the tariff was to protect the physical integrity of the telephone network. A variety of unaffiliated manufacturers argued, however, that AT&T's practice stifled competition and innovation. Through a series of decisions in the 1950s and 1960s, policymakers settled on the view that customers have a right to use their telephone in ways which are "privately beneficial without being publicly detrimental." *Hush-a-Phone, Corp. v. United States*, 238 F.2d 266, 269 (D.C. Cir. 1956); see also *Use of the Carterfone Device in Message Toll Telephone Service*, *Decision*, 13 F.C.C.2d 420, 423 (1968).

179. See 47 C.F.R. 362 § 68.1 (2006).

180. See, e.g., Tim Wu, *Wireless Carterfone*, 1 INT'L J. COMM. 389, 397 (2007).

But as important as the network attachment cases are to telecommunications regulation, it is the innovations in microprocessing, networked computing, and application development in the 1960s and 1970s that dramatically changed the ways in which policymakers conceive of communications regulation. Indeed, rulemakings from that period—the *Computer* cases—define regulation of broadband service today. To their credit, policymakers recognized that those markets did not suffer from the same threats to competition posed by incumbents in the telecommunications markets generally. Barriers to entry in markets for microprocessing, networked computing, and applications were low and competition and innovation were robust. Policymakers accordingly removed computer-enhanced communications service and applications from common-carrier regulation under Title II of the Communications Act.

In this Part, I review the economic arguments for and against nondiscrimination in the provision of broadband service. In Part III.B.1, I consider the position of proponents of broad nondiscrimination or network neutrality rules who argue that the Internet’s open network design provides as good a blueprint as any for understanding how government interventions will best encourage innovation and economic growth. These writers seem to find their strongest support in economic research on how open and unrestricted networking infrastructures provide for substantial economic gains. I critique this approach in Part III.B.2. In Part III.C.1, I will then review the argument that innovation is most efficiently achieved in an environment of regulatory restraint in which each firm can make decisions about service offerings and broadband services unconstrained by broad nondiscrimination rules. The most cost-effective engineering decisions, advocates of this view argue, will be made by entrepreneurs in the market, not by policymakers. I then conclude this analysis in Part III.C.2 by considering the affinities between the economic argument for minimal interference and Internet triumphalism. I also offer a critique that will lead to my own normative argument for broadband policy reform in Part IV. Before discussing these arguments, however, I offer immediately below, in Part III.A, a summary of the regulatory focus on competition that, since the 1960s, has brought us here.

A. Competition

1. Early Computer-Enhanced Communications Service

Title II of the Communications Act imposes common carriage nondiscrimination and interconnection rules on telephone service providers.¹⁸¹ In three proceedings stretching from the late 1960s to the mid-

181. See Communications Act of 1934, 47 U.S.C. § 151 et seq.

1980s, however, the FCC explicitly exempted computing or “enhanced” services provided by communication companies from such rules even as those services depended on the physical network of the telecommunications service providers.¹⁸² Telecommunications service providers and their affiliates, meanwhile, were barred from entering the emergent line of business.¹⁸³ This approach survives to this day in broadband policy.¹⁸⁴ The FCC’s assumption in the *Computer* cases was that, as an emergent line of business, enhanced services should not be hampered in any way by the predations of the large incumbent carriers, like AT&T, on which they depended.¹⁸⁵ (The incumbents had an incentive to cross-subsidize their own emergent data-processing services with monopoly profits from telephony.) Strict common carrier regulation imposed on carriers on the one hand and regulatory forbearance in the area of enhanced services on the other would level the playing field and encourage innovation.¹⁸⁶ The FCC eventually allowed the large incumbent service providers to also offer enhanced services free of regulation as long as the two lines of business were conducted under structurally separate affiliates.¹⁸⁷

The FCC later modified this rule of separation in the late 1970s and 1980s as computer applications migrated from large mainframe computers to smaller personal ones.¹⁸⁸ Forbearance would continue to be the rule for

182. *Computer I NOI*, *supra* note 65, at paras. 13-16; Amendment of Section 64.702 of the Commission’s Rules and Regulations, *Final Decision*, 77 F.C.C.2d 384, para. 132 (1980) [hereinafter *Computer II Final*]; Amendment of Sections 64.702 of the Commission’s Rules and Regulations, *Report and Order*, 104 F.C.C. 2d 958, paras. 2-6 (1986) [hereinafter *Computer III*].

183. *See supra* note 182.

184. As a regulatory term of art in communications policy today, “forbearance” can refer to the general posture of minimal intervention or, as under Section 10 of the Telecommunications Act, the dispensation the FCC may award any company in the interest of protecting consumers or ensuring just and reasonable rates and practices by carriers. *See* Telecommunications Act of 1996, Pub. L. No. 104-104, § 160, 110 Stat. 56 (codified at scattered sections of 47 U.S.C.).

185. *See, e.g., Computer II Final*, *supra* note 182, at para. 132. “Enhanced services” referred to storing, sorting, and calculating data according to programmed instructions at the end of the network. Regulatory and Policy Problems Presented by the Interdependence of Computer and Communication Services and Facilities, *Tentative Decision of the Commission*, 28 F.C.C.2d 291, para. 15 (1970) [hereinafter *Computer I Tentative*].

186. *Computer I Tentative*, *supra* note 185, paras. 22-23.

187. *Id.* at para. 36. *But see id.* at para. 24 (excepting AT&T pursuant to a consent judgment in *United States v. Western Electric Co.*, 13 RR 2143 (D. N.J. 1956)). The FCC also created a hybrid category for services that combined enhanced service and communications. *See id.* at paras. 39-45. These would be subject to case-by-case decision making. *Id.*

188. *See* J. Steven Rich, *Brand X and the Wireline Broadband Report and Order: The Beginning of the End of the Distinction Between Title I and Title II Services*, 58 FED. COMM. L. J. 221, 224-25 (2006). The case-by-case approach that the FCC had adopted as to “hybrid” services, in particular, became untenable as “customer premises equipment”

enhanced services since the market for computer applications remained competitive.¹⁸⁹ The FCC, however, removed the limited structural restriction between basic and enhanced services for all players except AT&T and its Regional Bell Operating Companies because they continued to be a powerful “bottleneck” to service.¹⁹⁰ Even this vestigial structural limitation, however, was lifted after the divestiture of AT&T in 1984.¹⁹¹ Consistent with the general deregulatory mood of the period, the FCC decided that maximum separation on any firms obstructed innovation and impeded the efficient allocation of costs.¹⁹² While it would not abandon its commitment to enforcing competition, the FCC explained, the Bell Operating Companies could enter both basic and enhanced service markets under the roof of one firm as long as each affiliate also allowed “comparatively efficient interconnection” to unaffiliated service providers on equal terms.¹⁹³

The *Computer* proceedings are generally viewed as successfully laying the groundwork for the modern Internet.¹⁹⁴ Even in its major 1996 overhaul of the 1934 Communications Act, Congress did not significantly change the classifications associated with basic transmission service and enhanced service.¹⁹⁵ The 1996 Telecommunications Act essentially

became both communication and computing consoles. *See* Amendment of Section 64.702 of the Commission’s Rules and Regulations, 72 F.C.C.2d 358, paras. 86, 64 (1979) [hereinafter *Computer II Tentative*]. AT&T, for example, was providing telephones with word processors. *See, e.g., Computer II Final, supra* note 182, at paras. 21, 23.

189. *See Computer II Tentative, supra* note 188, at paras. 70-71.

190. *See Computer II Final, supra* note 182, at para. 12. For a broader explanation, see *id.* at paras. 127-32, 219. The FCC retained the definition for “communication” in the new “basic” category. *See Computer II Tentative, supra* note 188, at para. 69. “Enhanced services” continued to refer to services that use computer processing to change the data being carried. *See id.* at para. 73.

191. *Computer III, supra* note 182, at paras. 2-6.

192. *Id.*

193. *See id.* The FCC, moreover, imposed an “Open Network Architecture” (ONA) that required the former Bell operating companies to make key elements of their various basic service offerings available to enhanced service providers. *See, e.g., Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services, Further Notice of Proposed Rulemaking*, 13 F.C.C.R. 6040, para. 16 (1998). Until the early 2000s, these “elements” included e-mail, voicemail, the World Wide Web, audiotext information services, and protocol processing. *See Policy and Rules Concerning the Interstate, Interexchange Marketplace, Report and Order*, 16 F.C.C.R. 7418, para. 2 (2001). Subsequent litigation resulted in a significant modification of the ONA rule, but the basic/enhanced distinction and the “comparably efficient interconnection” requirement governed the area until the late 1990s. *See Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services, supra* note 193, at para. 5.

194. *See, e.g., Cannon, supra* note 65, at 169, 205; Jonathan Weinberg, *The Internet and “Telecommunications Services,” Universal Service Mechanisms, Access Charges, and Other Flotsam of the Regulatory System*, 16 YALE J. ON REG. 211, 221-22 (1999).

195. *Compare* Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (codified in scattered sections of 47 U.S.C.), *with* Communications Act of 1934, ch. 652, 48

substituted the terms “information service” and “telecommunications service” for “enhanced service” and “basic service” but retained much of their substantive meaning.¹⁹⁶ Presumably, the basic/enhanced distinction established under the *Computer* decisions was a good model for how to encourage competition in the application industry. Large facilities-based wireline incumbents, like AT&T and MCI, remained sufficiently powerful and, therefore, would remain subject to interconnection and nondiscrimination obligations.¹⁹⁷

2. Minimal Interference for Broadband Service

By 2000, Internet access provided by cable companies was emerging as a viable alternative to that provided by telecommunications service providers.¹⁹⁸ Coaxial cables and cable modems afforded even faster digital transmission speeds—broadband—and, as such, posed a significant competitive threat to traditional service providers.¹⁹⁹ Telecommunications services, once characterized solely by the large circuit-switch distribution infrastructures that delivered them, moreover, were ceding ground to the packet-switched transmission technology of the Internet protocol.²⁰⁰ Industry leaders and activists alike encouraged the FCC to regulate all

Stat. 1064 (codified as amended in scattered sections of 47 U.S.C.). The 1996 Act promulgated an overtly “pro-competitive, de-regulatory national policy framework” for telephone service, imposing requirements on incumbent carriers to make necessary elements of their respective local networks available for leasing and resale in the event the lack of access would impair new entrants’ ability to provide retail service. S. REP. NO. 104-230, at 1 (1996) (Conf. Rep.) [hereinafter *Joint Explanatory Statement*]. See also *AT&T Corp. v. Iowa Utils. Bd.*, 525 U.S. 366, 387-88 (1999).

196. Compare 47 U.S.C. § 153(20) (2000) (defining an “information service” as “a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, and includes electronic publishing, but does not include any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service”), with Amendment of Sections 64.702 of the Commission’s Rules and Regulations, 104 F.C.C.2d 958, para. 2 (“competitive data processing services that are offered in conjunction with communications services”).

197. See *Nat’l Cable & Telecomm. Assoc. v. Brand X Internet Servs.*, 545 U.S. 967, 1000 (2005) (citing *Deployment of Wireline Services Offering Advanced Telecommunications Capability, Memorandum Opinion and Order*, 13 F.C.C.R. 24011, paras. 36-37 (1998) [hereinafter *Wireline Deployment Order*]); *id.* at 1001 (quoting *Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities, Declaratory Ruling and Notice of Proposed Rulemaking*, 17 F.C.C.R. 4798, para. 44 (2002) [hereinafter *Cable Declaratory Order*] (“telephone network [was] the primary, if not exclusive, means through which information service providers can gain access to their customers”) (internal quotations and emphasis omitted)).

198. *Cable Declaratory Order*, *supra* note 197, at para. 9.

199. See *id.*

200. Mark A. Lemley & Lawrence Lessig, *The End of End-to-End: Preserving the Architecture of the Internet in the Broadband Era*, 48 UCLA L. REV. 925 (2001).

broadband service on the basis of function²⁰¹—not the impermanent historical contingencies that distinguished telephony, wireless spectrum use, and cable television.²⁰² Regulators, they argued, should assume one regulatory posture for the application and content layer,²⁰³ another for the transmission logic for the data comprising the applications and content,²⁰⁴ and yet another for the layer of physical transmission over which the data actually travel.²⁰⁵ The success of the *Computer* cases, they argued, is the strongest FCC precedent for such an approach.²⁰⁶

In 2002, the FCC assented to the reformist layered approach. It entered a declaratory order in which it designated cable modem service to be an “information service” under the 1996 Act and, as such, free from Title II common carrier obligations otherwise imposed on “dial-up” and faster “digital subscriber line” (DSL) service provided by telecommunications companies.²⁰⁷ Competition in the broadband cable market, the FCC explained, was sufficiently robust to make such requirements unnecessary.²⁰⁸ Invoking the logic of the *Computer* decisions, the FCC explained that “broadband services should exist in a minimal regulatory environment that promotes investment and innovation in a competitive market.”²⁰⁹ The Supreme Court upheld the FCC’s order in 2005 in *National Cable and Telecommunications Association v. Brand X*.²¹⁰ The Court, however, left open the possibility that the FCC might, in

201. See, e.g., Richard S. Whitt, *A Horizontal Leap Forward: Formulating a New Communications Public Policy Framework Based on the Network Layers Model*, 56 FED. COMM. L.J. 587 (2004). See also *United States v. Sw. Cable Co.*, 392 U.S. 157 (1968); *Nat’l Broad. Co. v. United States*, 319 U.S. 190 (1943).

202. See generally Communications Act of 1934, ch. 652, Title II, 48 Stat. 1064, 1070 (regulating telephony); see Title III, 48 Stat. 1064, 1081 (regulating broadcasting); Title VI, 48 Stat. 1064, 1101 (regulating cable companies).

203. See, e.g., *Nat’l Cable & Telecomm. Assoc. v. Brand X Internet Servs.*, 545 U.S. 967, 1012 (2005) (Scalia, J., dissenting) (stating that “the statutory criteria for forbearance—which include what is ‘just and reasonable,’ ‘necessary for the protection of consumers,’ and ‘consistent with the public interest,’—correspond well with the kinds of policy reasons the Commission has invoked to justify its peculiar construction of ‘telecommunications service’ to exclude cable-modem service”) (internal citations omitted).

204. See *Appropriate Framework For Broadband Access to the Internet Over Wireline Facilities*, *Notice of Proposed Rulemaking*, 17 F.C.C.R. 3019, para. 13 (2002).

205. See *Appropriate Framework for Broadband Access to the Internet over Wireline Facilities*, *Report and Order and Notice of Proposed Rulemaking*, 20 F.C.C.R. 14853, para. 1 (2005) [hereinafter *Wireline Broadband Order*].

206. See *supra* III(A)(1).

207. See *Cable Declaratory Order*, *supra* note 197, at para. 41.

208. See *id.* at para. 6 (citing the rise of “electronic platforms, including wireline, cable, terrestrial wireless and satellite”).

209. *Id.* at para. 5 (internal quotations omitted).

210. See 545 U.S. 967, 978 (2005) (quoting *Cable Declaratory Order*, *supra* note 197, at para. 38).

the future, also remove DSL service from common carrier obligations.²¹¹ But that was a decision to be made prospectively by the FCC. In short, the *Brand X* case affirmed minimal interference as the appropriate administrative policy choice in the era of technological convergence.

The FCC responded to the *Brand X* decision two months later, publishing two rulings on the particulars of Section 230(b) as applied to all broadband service providers: the *Wireline Broadband Order* and a short *Internet Policy Statement*.²¹² In the first, the FCC took up the Supreme Court's suggestion in *Brand X* and declared that it would now consider *all* broadband services—cable modem and DSL service as well as fixed and mobile wireless services, satellite services, and broadband over power-line services—to be “information services” under its residual Title I ancillary jurisdiction.²¹³ Such services, it announced, would not be subject to the same nondiscrimination and interconnection regulations to which circuit-switched telephone service providers and cable television service providers must attend under Titles II and VI, respectively.²¹⁴ The FCC explained that it did not want to impede entrepreneurial experimentation or innovation.²¹⁵

With the *Internet Policy Statement*, however, the FCC signified a very modest but notable shift away from the precedent of the *Computer* cases. In the latter, the FCC was concerned foremost with protecting smaller competitors in emergent markets from AT&T's monopoly position in the transmission market.²¹⁶ In 2005, on the other hand, the FCC was concerned, above all, with protecting consumer choice.²¹⁷ In the *Internet Policy Statement*, the FCC enumerated four consumer protection principles to

211. *Id.* at 1001; *see also id.* at 1002:

Any inconsistency between the order under review and the Commission's treatment of DSL service can be adequately addressed when the Commission fully reconsiders its treatment of DSL service and when it decides whether, pursuant to its ancillary Title I jurisdiction, to require cable companies to allow independent ISPs access to their facilities.

Id. The FCC did as much in its market-defining *Wireline Broadband Order* a few months after the Court announced *Brand X*. *See Wireline Broadband Order, supra* note 205, para. 1.

212. *See Wireline Broadband Order, supra* note 205, at para 1; *Internet Policy Statement, supra* note 37, at para. 2.

213. *Wireline Broadband Order, supra* note 205, at para. 50.

214. *See id.* at paras. 40–41. *See also* 47 U.S.C. § 153(20), (46).

215. *See Wireline Broadband Order, supra* note 205, at para. 41. The distinction between telecommunications and information service simply tracked the earlier distinction between basic and enhanced service in the *Computer* proceedings. *See supra* III(A)(1).

216. *See supra* Part III.A.1.

217. *See Internet Policy Statement, supra* note 37, at para. 4. The *Internet Policy Statement* uses the term “consumer” rather than “user.” The latter is ostensibly more reflective of the dynamism of the Internet. On the other hand, “consumer” acknowledges that the political economy of the Internet is not as democratic or egalitarian as the early netizens presumed it might be.

guide broadband regulation.²¹⁸ Sections 230(b) and 157, the FCC explained, require the FCC, as a general matter, to ensure that broadband services “operate[] in a neutral manner” and that those services “are widely deployed, open, affordable, and accessible to all consumers.”²¹⁹ Looking forward, the FCC would assume that consumers are entitled to (1) “access the lawful Internet content of their choice,” (2) “run applications and use services of their choice, subject to the needs of law enforcement,” (3) “connect their choice of legal devices that do not harm the network,” and (4) enjoy the benefits of “competition among network providers, application and service providers, and content providers.”²²⁰ In short, the FCC ruled that access regulation had a place in broadband service, just not in the ways it had been applied to the dominant telecommunication firms before.²²¹

Predictably, the FCC’s 2005 effort did not settle things instantly. First, the *Internet Policy Statement* was ostensibly not particular enough to create causes of action.²²² Further rulemaking, at least a majority agreed, would be necessary to elaborate on what constitutes “reasonable” broadband network management practices. Second, both 2005 FCC actions were inconclusive as to many industry practices and services. Voice-over-Internet Protocol (VoIP), for example, remains in limbo because it presumably straddles the telecommunications/information distinction.²²³ The FCC consistently has rejected efforts to remove the legal advantage that VoIP and other Internet-enabled services gained through the *Broadband Wireline Order*. It, for example, has kept emergent VoIP service providers, like Skype and Vonage, quite free from the intercarrier

218. *See id.* In *Brand X*, the Supreme Court lifted any doubt about whether the FCC had “ancillary jurisdiction” under Title I of the Communications Act to regulate “providers of telecommunications for Internet access or [IP-enabled] services.” *Id.*

219. *Id.*

220. *Id.*

221. *See* Nuechterlein, *supra* note 39, at 50-51 (discussing interaction between “common carrier exemption” under the Federal Trade Commission Act and the 2005 FCC orders to assert that the FCC has not designated Internet access service “common carriage” in the way that term is used by regulators generally).

222. A majority of commissioners appeared to recognize as much in contemporaneous individual statements. *See Internet Policy Statement*, *supra* note 37, at 14975 (statement of Chairman Kevin J. Martin); *Wireline Broadband Order*, *supra* note 205, at 14980 (statement of Comm’r Michael J. Copps, concurring). *But see Comcast Order*, *supra* note 6, at 13070-72 (statement of Chairman Kevin J. Martin).

223. *See, e.g.*, *Minn. Pub. Util. Comm’n v. FCC*, 483 F.3d 570, 574-75 (8th Cir. 2007). This is not to say that they are not subject to other requirements. *See Nuvio Corp. v. FCC*, 473 F.3d 302 (D.C. Cir. 2006) (upholding E911 requirements for VoIP).

compensation requirements imposed on AT&T and other plain old telephone service providers.²²⁴

Due in large part to this institutional history, abbreviated as it is here, prominent scholars in the field all appear to depend in large part on economic analysis to make their claims on what substantive broadband policy today ought to be.²²⁵ They set aside secondary subjective considerations about how enriching any given online experience might be.²²⁶ As substantive and predictive as these models are, however, they do not consider the governance schemes that might produce these rules. Competitiveness, efficiency, and economic growth are seen as superior objective measures and more tractable proxies for vaguely articulated engineering principles like decentralization, interoperability, and user sovereignty.²²⁷ These economic approaches do not consider the institutional means by which their policy recommendations can or ought to be promulgated.

B. *Emergence Economics*

1. The Wealth of Networks

One popular approach to broadband policy presumes that current policy should account above all for the ways in which the Internet contributes to economic growth.²²⁸ “A network effect exists,” this view holds, “where purchasers find a good more valuable as additional purchasers buy the same good.”²²⁹ The value added by every additional participant “grows exponentially with the size of the network.”²³⁰ As such, proponents of this view argue, broad common carriage and network neutrality rules, as well as support for universal access, would help to grow

224. See Petition for Declaratory Ruling that AT&T’s Phone-to-Phone IP Telephony Services Are Exempt from Access Charges, *Order*, 19 F.C.C.R. 7457, para. 1 (2004). This is not to say that they are not subject to other requirements. See, e.g., *Nuvio Corp. v. FCC*, 473 F.3d 302 (D.C. Cir. 2006) (upholding E911 requirements for VoIP).

225. See, e.g., *infra* notes 237-38 and accompanying text.

226. See, e.g., Nuechterlein, *supra* note 39, at 35, 38 (dismissing “speculative First Amendment concerns” about the broadband network as “often quite vague in [their] articulation”).

227. Cf. Vincent Blasi, *Holmes and the Marketplace of Ideas*, 2004 SUP. CT. REV. 1 (2004); Philip Napoli, *The Marketplace of Ideas Metaphor: In Communications Regulation*, 49 J. COMM. 151 (1999).

228. See Susan P. Crawford, *The Internet and the Project of Communications Law*, 55 UCLA L. REV. 359, 390 (2007); Whitt & Schultze, *supra* note 7, at 263.

229. Mark A. Lemley & David McGowan, *Legal Implications of Network Economic Effects*, 86 CAL. L. REV. 481, 483 (1998). See also Eli Noam, *A Theory for the Instability of Public Telecommunications Systems*, in *THE ECONOMICS OF INFORMATION NETWORKS* 107, 107-28 (Cristiano Antonelli ed., 1992).

230. Lemley & McGowan, *supra* note 229, at 484 (emphasis omitted).

the economy.²³¹ High participation rates, they presume, enable all those connected to flourish, even if any given user's contribution is likely to be marginal.

This insight has important implications for substantive communications law and policy generally. In a paper directed at policymakers, Richard Whitt and Stephen Schultze recently argued that broadband policy ought to leverage the "network effects" of Internet communications.²³² The main goods and services to be exchanged in such markets, they explain, are not scarce in the way most other physical objects tend to be.²³³ Returns in the physical world generally begin to diminish after a certain size is reached. Not so, Whitt and Schultze have explained: in information networks like the Internet, there is economic value in interconnection itself.²³⁴ Or, as Susan Crawford puts it, each new connection creates new opportunities for collaboration.²³⁵ The "project of communications law" in this country, she argues, "should be to facilitate human online communications (and thus new ideas) rather than to optimize conditions for particular private infrastructure providers."²³⁶ The specific policy implications for this approach include, first, reforming the universal-service program so that more people have high-speed Internet access;²³⁷ second, implementing strong common carrier nondiscrimination and interconnection obligations to protect "end-to-end universal connectivity" and robust competition in the application market;²³⁸ and, third, separating users' transmission needs from network owners' self-interested priorities.²³⁹

The administration of President Barack Obama appears to have caught on to these arguments for communications policy. Crawford, who

231. See Crawford, *supra* note 228, at 390; Whitt & Schultze, *supra* note 7, at 263.

232. See Whitt & Schultze, *supra* note 7, at 220-21.

233. *Id.* at 228.

234. *Id.* at 239. See also Manuel Castells, *Informationalism, Networks, and the Network Society: A Theoretical Blueprint*, in *THE NETWORK SOCIETY* 3, (2004).

235. See Crawford, *supra* note 228, at 384, 389. Crawford does not make any explicit reference to social network analysis, but she may as well have. See also Beth S. Noveck & David R. Johnson, *Society's Software*, 74 *FORD. L. REV.* 469, 483 (2005) (discussing untapped opportunities for social interaction generally); Anthony E. Varona, *Toward a Broadband Public Interest Standard*, 61 *ADMIN. L. REV.* 1, 84-85 (2009) (discussing how household Internet access is important for jobseekers and productivity generally). *But see* Brent Staples, *Just a Toaster with Pictures*, *N.Y. TIMES*, Feb. 8, 1987, at sec. 7, available at 1987 WLNR 981803 (quoting Reagan-era FCC Chairman Mark Fowler as saying that televisions were nothing more than "toasters with pictures").

236. Crawford, *supra* note 228, at 364 (emphasis omitted).

237. See *id.* at 393-94. See also Kevin Werbach, *Connections: Beyond Universal Service in the Digital Age*, 7 *J. ON TELECOMM & HIGH TECH. L.* 67, 68, 72 (2009).

238. Crawford, *supra* note 228, at 395; see also Crawford, *supra* note 65, at 886.

239. See Crawford, *supra* note 228, at 404, 406.

sits on the President's National Economic Council and is an advisor to the White House on communications technology, recently affirmed that, while "access to broadband doesn't guarantee economic success," the lack of access "will guarantee economic stagnation and decline."²⁴⁰ And so, through the recent \$787 billion outlay provided through the Recovery Act, the administration has sought "to increase economic efficiency" and "provide long-term economic benefits" to the nation during the recession by generating jobs and other significant public benefits.²⁴¹ The National Telecommunications and Information Administration and the Agriculture Department will distribute \$7.2 billion to businesses that build out broadband service in rural, "unserved," and "underserved" areas on the condition that grantees promise to adhere to nondiscrimination principles.²⁴² The \$7.2 billion pales in comparison to the rest of the projects funded by the Recovery Act, but it dwarfs by a magnitude of billions any previous single government outlay on broadband deployment.²⁴³

2. Why Network Wealth Is Not All That Matters

There is a lot to be said for importing "emergence economics" into communications policy. But there are some important limitations. First, consider that universal service has been a putative goal of U.S. telecommunications policy ever since Theodore Vail and AT&T were making an argument for it at least a century ago.²⁴⁴ Since 2002, however,

240. Cheryl Bolen, *Federal Efforts to Spur Broadband Could Be Best Help for Journalism*, TELECOMM. MONITOR, May 15, 2009, at D2.

241. See American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-05, § 3(a)(3), (4), 123 Stat. 115, 116 (2009).

242. See *id.* at § 6001, 123 Stat. 512-16. The legislation commands the NTIA to work with the FCC to define the terms "broadband," "unserved area," and "underserved area." It allows, however, that the grants may go to "any recipient that best serves an area's needs, including wireless providers, wireline providers, or any provider offering to construct last-mile, middle-mile, or long-haul facilities." See Stephanie Condon, *Stimulus Bill Includes \$7.2 Billion for Broadband*, CNET NEWS, Feb. 17, 2009, http://news.cnet.com/8301-13578_3-10165726-38.html.

243. Funds for the universal-service program, which distributes about \$7 billion every year for "underserved," "unserved," and low-income communities and individuals, come from fees imposed on long-distance telecommunications service providers (and passed on to consumers as a line item in the telephone bill). The FCC's Universal Service Support Mechanisms, <http://www.fcc.gov/cib/consumerfacts/universalservice.html> (last visited Mar. 12, 2010). By contrast, the \$7.2 billion available under the Recovery Act for broadband deployment is a government outlay that originates from the general fisc.

244. Visionary Bell President Theodore Vail wanted the network owner to be the most pervasive and, as a result, most valuable and sought-after communications service provider. The idea, according to Vail, was to extend the network "from every man's door to every other man's door." AT&T, ANNUAL REPORT 23 (1910). Once the company had reached a certain absolute number of subscribers, Vail believed, its case to prospective subscribers and regulators would be made substantially easier. *Id.* The theory of network effects has since confirmed as much. See NUCHECHTERLEIN & WEISER, *supra* note 173, at 339-42.

the FCC has excluded residential broadband access from the universal-service program on the grounds that it is not, as the amended Communications Act requires, “essential to education, public health, or public safety.”²⁴⁵ Instead, the FCC has aspired to universal service for broadband service through discrete budget outlays like those contained in the Recovery Act. Without a sustained mandate to provide it, network owners have been slow to invest in broadband service to remote areas.²⁴⁶ Historically disadvantaged groups (i.e., blacks, Latinos, the poor and lower middle class, the elderly) also lag behind in access.²⁴⁷ Provision of universal broadband service, then, is contingent on political will, not economics.²⁴⁸

Second, proposals for universal service do not speak to the intensity or quality of participation. The extent to which consumers have at least one broadband provider available surely increases the likelihood that they will go online. Social science research confirms that wider involvement in networks has social benefits that accrue to everyone.²⁴⁹ But communications in emergence economics framing is evaluated solely on its ex post economic impacts and, as such, is not so concerned about the activities for which many people could go online. This flaw is hardly fatal; economic growth is vital to achieve other relevant objectives. But silence on communication’s other material contributions to society is significant. While simple network membership has its privileges, there are no

245. Federal-State Joint Board on Universal Service, *Recommended Decision*, 18 F.C.C.R. 2943, para. 2 (2002).

246. Chris Naoum, *Experts Debate Civil Rights Issue in Context of Broadband*, BROADBAND BREAKFAST, Jan. 25, 2010, <http://broadbandbreakfast.com/2010/01/experts-debate-civil-rights-issues-in-context-of-broadband> (last visited Feb. 23, 2010).

247. See Varona, *supra* note 235, at 47-48; Jack M. Balkin, *Media Access: A Question of Design*, 76 GEO. WASH. L. REV. 933, 940 (2008).

248. See Cheryl Bolen, *Barton Urges USF Reform After FCC Provides Program Data*, TELECOMM. MONITOR, June 8, 2009, at D3. The \$7.5 billion Universal Service Fund program is a political contest between “carriers, vendors, and senators who benefit directly and indirectly from the status quo.” Crawford, *supra* note 228, at 393. Stakeholders do not pretend to want anything more out of the program than what their self-interested needs ostensibly require. See, e.g., Mike Farrell, *The \$7.2 Billion Question; Lawmakers Puzzle Over Who Is ‘Unserved’ As They Dole Out Broadband Stimulus Funds*, MULTICHANNEL NEWS, May 11, 2009, at 6. For classic treatment of public choice theory in public policy, see generally Richard A. Posner, *Theories of Economic Regulation*, 5 BELL J. ECON. 335 (1974) and George Stigler, *The Theory of Economic Regulation*, 2 BELL J. ECON. 3 (1971).

249. See Paul Bourdieu, *The Forms of Capital*, in HANDBOOK OF THEORY AND RESEARCH OF THE SOCIOLOGY OF EDUCATION 46, 47-48 (J.G. Richardson, ed., 1986); JAMES S. COLEMAN, FOUNDATIONS OF SOCIAL THEORY 300-05 (1990); NAN LIN, SOCIAL CAPITAL: A THEORY OF STRUCTURE AND ACTION (2001); ROBERT PUTNAM, BOWLING ALONE 19 (2000); Barry Wellman, *Structural Analysis: From Method and Metaphor to Theory and Substance*, in SOCIAL STRUCTURES: A NETWORK APPROACH 19, 19-22 (Barry Wellman & S.D. Berkowitz, eds. 1988).

guarantees.²⁵⁰ Economic growth, after all, is only as socially useful as the material products that comprise it, the processes by which it is achieved, and the ways in which individuals use it to their own benefit.²⁵¹ This is all the more true in liberal republican democracies for which public deliberation between citizens is foundational.²⁵² Furthermore, research shows that exclusive focus on links and growth glosses over the antecedent structural factors that determine meaningful participation in networks, like access to resources across socioeconomic groups,²⁵³ the prevailing norms within a network,²⁵⁴ and the purposes for which the network was created.²⁵⁵

As with the prevailing technological approach, then, the emergence economics approach lacks the competence to appraise the qualitative character of communications. Of course, Internet participation can and should be regulated on the basis of the economic activity it affords. However, without more, such regulation is insufficiently reflective of the fact that communication is generally a practice whose impact is social and public, not just economic.²⁵⁶

C. *Efficiency and Welfare Economics*

One of the rebuttals to the emergence economics approach to broadband policy asserts that open network design is not necessarily the most efficient way of delivering applications in an environment in which more users are accessing the Internet to do so many different things.²⁵⁷ A broadband service provider's unilateral decision, for example, to cap bandwidth use might be better for the vast majority of users.²⁵⁸ This is especially true as, according to a recent study, the top five percent of users consume approximately forty percent of the total available bandwidth,

250. See PUTNAM, *supra* note 249, at 171, 174-79. See also BEN FINE, SOCIAL CAPITAL VERSUS SOCIAL THEORY: POLITICAL ECONOMY AND SOCIAL SCIENCE AT THE TURN OF THE MILLENNIUM 179-80, 182 (2001); Nan Lin, *Building a Network Theory of Social Capital*, in SOCIAL CAPITAL: THEORY AND RESEARCH 3, 11 (Nan Lin, Karen Cook & Ronald S. Burt, eds., 2001).

251. Cf. JULIE A. NELSON, ECONOMICS FOR HUMANS 4 (2006); Amartya Sen, *Adam Smith's Market Never Stood Alone*, FIN. TIMES, Mar. 11, 2009, at 11.

252. See PUTNAM, *supra* note 249, at 402-06.

253. See Lin, *supra* note 250, at 5, 14.

254. See FINE, *supra* note 250, at 182.

255. See Lin, *supra* note 250, at 11-13.

256. See James Carey, *Communications and Economics*, in JAMES CAREY: A CRITICAL READER 60, 64 (Eve Stryker Munson & Catherine A. Warren, eds., 1997).

257. See, e.g., Thomas B. Nachbar, *The Public Network*, 17 COMM'LAW CONSPECTUS 67, 132-33 (2008); David F. Spulber & Christopher S. Yoo, *Rethinking Broadband Internet Access*, 22 HARV. J.L. & TECH. 1, 19-20 (2008).

258. See *Comcast Order*, *supra* note 6, at 13093 (statement of Comm'r Robert M. McDowell, dissenting).

while the bottom fifty percent of users consume about twelve percent.²⁵⁹ Without some mechanism to distinguish between heavy users and light users, broadband service providers argue, bandwidth congestion will diminish the online experience for most customers.²⁶⁰ A flat nondiscrimination rule could therefore diminish consumer welfare.²⁶¹

In any event, technological convergence across cable, telephony, and wireless platforms has rendered the broadband market more competitive and dynamic than anything occurring before the AT&T/Bell divestiture.²⁶² Rather than mandate nondiscrimination for all providers then, advocates of welfare economics argue that policymakers should encourage the deployment of a diversity of networks so that different providers can experiment with bundled and differentially priced application offerings.²⁶³ Consumer welfare might actually be optimized when companies are able to choose for themselves whether to impose flat fees for simple connectivity or consumption-based pricing.²⁶⁴

In such a regulatory arrangement, broadband providers could, on the one hand, choose to keep their network open and offer subscribers access to applications developed by unaffiliated competitors in the interest of broadening the commercial appeal of their service. Economic research since the 1970s strongly suggests that many firms in competitive markets actually have an incentive not to discriminate against unaffiliated applications and content in order to keep consumers happy.²⁶⁵

259. See ARBOR NETWORKS, REDUCE NETWORK COSTS BY OPTIMIZING BANDWIDTH UTILIZATION 5, available at http://www.arbornetworks.com/index.php?option=com_docman&task=doc_download&gid=377. See also Ryan Kim, *Online Bandwidth Hogs—Cut Off at Trough?; All-You-Can-Eat Internet Days May Be Over as Providers Test Limits, Metered Pricing*, S.F. CHRON., June 23, 2008, at D1.

260. See *Comcast Order*, *supra* note 6, at 13093 (statement of Comm’r Robert M. McDowell, dissenting). This says nothing of the competitive threat that emergent nonsharing as well as peer-to-peer platforms pose to video distribution services provided by many major service providers. Stacy Higginbotham, *Nielsen Data Offers Real Reason ISPs Are Metering*, GIGAOM.COM, Apr. 22, 2009, <http://gigaom.com/2009/04/22/nielsen-data-offers-real-reason-isps-are-metering>. According to a recent Nielsen report, online user engagement has been deepening dramatically for the past several years, with the number of U.S. users accessing online video destinations climbing 339 percent since 2003 and the time spent on such sites growing by almost 2,000 percent over the same period. See NIELSEN, THE GLOBAL ONLINE MEDIA LANDSCAPE: IDENTIFYING OPPORTUNITIES IN A CHALLENGING MARKET 5-6 (Apr. 2009) available at <http://blog.nielsen.com/nielsenwire/wp-content/uploads/2009/04/nielsen-online-global-lanscapefinal1.pdf>.

261. See *supra* note 257 and accompanying text.

262. See Spulber & Yoo, *supra* note 257, at 25-27.

263. See Nuechterlein, *supra* note 39, at 36; Yoo, *supra* note 105, at 1852.

264. See Nuechterlein, *supra* note 39, at 29; Yoo, *supra* note 105, at 1853.

265. See RICHARD A. POSNER, *ANTITRUST LAW* (2001); Joseph Farrell & Philip J. Weiser, *Modularity, Vertical Integration, and Open Access Policies: Towards a Convergence of Antitrust and Regulation in the Internet Age*, 17 HARV. J. L. & TECH. 85, 104 (2003); Yoo, *supra* note 263, at 1885-87.

Or, on the other hand, broadband providers may decide that their service would be more competitive in the market if it only included affiliated applications; they may find that vertically integrating the whole sweep of Internet-related services within one closed service, from physical transmission to online applications, may be more efficient than they would otherwise be in a regime that required open access in all cases.²⁶⁶ The decrease in application choices for subscribers could arguably be offset by the improved quality of service offerings.²⁶⁷ Such an arrangement does not obviate the need for tough antitrust interventions in the event network owners engage in anticompetitive behavior.²⁶⁸ But it certainly counsels against implementing a broad nondiscrimination rule.²⁶⁹ Allowing the owners of networks and their engineers to make their own choices about architecture, pricing, and services unimpeded by blanket nondiscrimination and interconnection mandates could very well assure high-quality service.²⁷⁰ Broadband service networks “are complex systems whose behavior can only be understood after considering the particular way that various network elements interact with one another.”²⁷¹ Vertical integration in a truly competitive market, these writers argue, will reward major content innovators and, in the end, assure high-quality service for most Internet users.²⁷² Efficiency, therefore, is best achieved through the heroic, market-defining decisions of vertically integrated competitors in the market.²⁷³ The contemporaneous social effects on users are important but secondary to efficiencies in the market.

Framed in these terms, the case for broad nondiscrimination rules is not very strong.²⁷⁴ It is not enough to assert merely that regulation is justified because the communication market is overly concentrated or insufficiently focused on users. Proponents of broad nondiscrimination rules “have the burden of showing that regulation is *superior* to market allocation” as a general matter, all the time.²⁷⁵ This is a difficult proof to make when efficiency is your background normative assumption and

266. See Spulber & Yoo, *supra* note 257, at 34.

267. See Christopher S. Yoo, *Beyond Network Neutrality*, 19 HARV. J.L. & TECH. 1, 34 (2005). See also Kevin Werbach, *Only Connect*, 23 BERKELEY TECH L.J. 1234, 1283 (2008).

268. Nuechterlein, *supra* note 39, at 31, 43.

269. See Yoo, *supra* note 105, at 1855.

270. See Werbach, *supra* note 10, at 375-76; Yoo, *supra* note 105, at 1852.

271. Spulber & Yoo, *supra* note 257, at 5.

272. *Id.* at 35-36.

273. These writers often refer to the work of Joseph Schumpeter, citing in particular his argument that the most enduring firms are those who revolutionize industries and “creatively destroy” the market position of the extant major incumbents in the process. JOSEPH A. SCHUMPETER, *CAPITALISM, SOCIALISM AND DEMOCRACY* 84 (3d ed. 1950).

274. See Nachbar, *supra* note 257, 115-16 (2008).

275. *Id.* at 116.

increased economic welfare for consumers is your ostensible objective. Absolute nondiscrimination will never be the welfare-maximizing option all the time until improvements in transmission technologies afford true bandwidth abundance. Anyway, arguments for network neutrality as such are insufficiently descriptive of the variety of distribution arrangements currently structuring broadband use. Today, a diversity of network owners, including those with coveted “caching” facilities, provide speedier and more reliable service at premium prices to online services, application providers, and individual subscribers.²⁷⁶ In this environment, traditional antitrust rules attentive to the particular characteristics of the market are the most appropriate checks.²⁷⁷

D. Liberal Deference and Self-Governance

As compelling as welfare economics is, policymakers and legal scholars can be forgiven for privileging efficiency and consumer welfare. After all, by focusing on such quantitative measures, policymakers can brush aside the flighty romance associated with Internet triumphalism to conceive of the Internet as a physical network of cables and transmission protocols that is naturally constrained by high-stakes contests over scarce resources and subscribers and still remain true to a hands-off approach. Bandwidth scarcity and the a priori assignment of property rights in the network really determine the ways in which broadband service providers carry the bits and bursts of data for which users are clamoring.²⁷⁸ With this analytical frame, policymakers are arguably not distracted by the subjective interpretations generally associated with debates over rights or disparities.

As suggested at the end of Part II, liberal welfare economics in particular has some purchase in the context of substantive broadband policy because its background assumptions about market behavior smoothly dovetail with triumphalists’ assumptions about the operation of the

276. Posting of Larry Dignan to ZDNet, <http://blogs.zdnet.com/BTL/?p=11225> (Dec. 15, 2009, 2:15 EST).

277. Brennan, *supra* note 39, at 141-43; J. Thomas Rosch, *Broadband Access Policy: The Role of Antitrust*, CORP. COUNS.’S Q., Jan. 2009, at 1, 4; Spulber & Yoo, *supra* note 39, at 1849. *See also* Nuechterlein, *supra* note 39, at 24-26. The occasions on which the federal government, in fact, has invoked antitrust law in the area of telecommunications explicitly since 1996 have been the exception rather than the rule. *See, e.g.*, FCC, Fact Sheet: FCC’s Conditioned Approval of AOL-Time Warner Merger (2001), *available at* http://www.fcc.gov/Bureaus/Cable/Public_Notices/2001/fcc01011_fact.pdf (approving the America Online and Time Warner merger of the late 1990s). *Cf.* Verizon Comm., Inc v. Trinko, 540 U.S. 398, 412 (2004) (stating that, in telecommunications law, “the additional benefit to competition provided by antitrust enforcement will tend to be small”).

278. *See* Julie E. Cohen, *Cyberspace as/and Space*, 107 COLUM. L. REV. 210, 244 (2007). *See generally* R.H. Coase, *The Federal Communications Commission*, 2 J.L. & ECON. 1 (1959).

Internet.²⁷⁹ The protagonists of the Internet's nativity story, for example, generally repudiated centralized governance of transmission in ways that are easily evocative of Adam Smith's legendary rejection of statist mercantilism.²⁸⁰ Implicit in the transmission protocols promulgated by the IETF is the assumption that the Internet and its users are self-governing; the Internet's success, it suggests, is born from the intelligence at the networks' ends and not the regulatorily "captured" mandates of central planners or network owners.²⁸¹ Like the price system in the free market,²⁸² the deluge of information online actually has an objective internal logic for distributing information that is otherwise elusive to those of us immersed in it. Emergent curatorial and indexing conventions only render information on the Internet intelligible and searchable.

This admixture of triumphalism and liberal economics permeates substantive broadband policymaking so that, today, with the notable exception of the *Comcast* decision, the FCC continues to pursue "a minimal regulatory environment for wireline broadband Internet access services."²⁸³ Common carrier requirements imposed on all other carriers covered by the amended Communications Act should not be applied to broadband service because, the FCC recently explained, they "constrain technological advances and deter broadband infrastructure investment."²⁸⁴ The IETF's substantive transmission principles of decentralization, user empowerment, and interoperability, on the other hand, do not.²⁸⁵ Those principles, according to the FCC, "promote innovative and efficient communications."²⁸⁶ And it is here, through hermeneutic slight of hand, that the IETF's substantive engineering principles acquire the glow of legally enforceable norms. Conflated as they are with the liberal economic commitment to innovation and efficiency, these substantive engineering principles stand as evidence that the IETF, as a matter of broadband governance, is a far more appropriate legal authority than government institutions ever could be. Liberal deference to self-regulatory organizations, like the IETF in the *Comcast* case, is taken to be an effective

279. See *supra* Part II.

280. ADAM SMITH, WEALTH OF NATIONS 484-85 (2000).

281. LAWRENCE LESSIG, CODE: VERSION 2.0 320 (2006) (governmental decision-making processes in democracies are notoriously "captured by special interests more concerned with individual than collective values. Although we believe that there is a role for collective judgments, we are repulsed by the idea of placing the design of something as important as the Internet into the hands of governments").

282. Cf. F.A. Hayek, *The Use of Knowledge in Society*, 35 AM. ECON. REV. 519, 525 (1945).

283. *Wireline Broadband Order*, *supra* note 205, at para. 1.

284. *Id.* at para. 19.

285. See *Comcast Order*, *supra* note 6, at para. 45.

286. *Wireline Broadband Order*, *supra* note 205, at para. 1.

solution for the lack of substantive law in the emergent area of broadband service.

But, as broadband service matures and spreads, it cannot be anything but a temporary fix for a problem that, at least historically, has been resolved instead through public-regarding political processes and publicly legitimated norms. Broadband policy should not depend as it did in the *Comcast* decision on the beneficence of the members of the IETF. Communications are too fundamental to democratic self-governance. As such, voters and elected officials ought to be making decisions about communication policy's normative priorities, not outsourcing them, no matter how expert industry standard setters might be or how unnerving democratic governance is.

Conceiving of the Internet as a platform for democratic self-governance rather than an engine for innovation or the efficient distribution of applications and content illuminates a glaring hole in broadband policymaking today—democratic legitimacy. Simply enforcing consumer choice mandates or imposing common carrier standards would be useful interventions, but they do not address the illegitimacy of a communications policymaking process that is not systematically addressed to the public or its interests. Indeed, a monomaniacal focus on economic measures like innovation, economic growth, and efficiency detracts from actualizing the more public-minded priorities of communications policy. Even proposals to subject self-regulatory organizations' adjudications and rulemakings to public (agency) oversight are inadequate because they forsake the authority of democratically legitimated lawmaking bodies to make decisions in the first instance about the structure of public life. Elected and politically appointed policymakers should be more than merely “norm entrepreneurs” responsible merely for brokering communications policy.²⁸⁷ They ought to be the institutions by which stakeholders and their representatives contest and then articulate public priorities in the first instance.

IV. THE PARTICIPATORY APPROACH TO BROADBAND POLICYMAKING

In the Recovery Act, Congress commanded the FCC to formulate a new comprehensive broadband policy by early 2010.²⁸⁸ The FCC responded by requesting comments from the public.²⁸⁹ Alongside its stated interest in achieving universal access by ensuring the broadband market is

287. *Contra* Weiser, *supra* note 2, at 536.

288. American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-05, § 6001, 123 Stat. 115, 512-516 (2009) (codified at 47 U.S.C. § 1305).

289. See Press Release, FCC, FCC Launches Development of National Broadband Plan (Apr. 8, 2009), available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-289900A1.pdf.

competitive,²⁹⁰ the FCC solicited comments on “a broad array of public interest goals.”²⁹¹ It is for this reason that I argue, here, that broadband communications policy should attend to considerations other than competition, efficiency, innovation, and economic growth.²⁹² One series of questions solicited responses on how broadband service might increase “civic participation” in deliberations concerning public policy: what is the best way, it asked, to achieve “increasing public awareness and participation in government[?]”²⁹³ Does, for example, social networking on the Internet afford opportunities for encouraging civic participation?²⁹⁴ Another series of questions sought comment on how broadband might “improve citizen access to local and national news, information, dialogue with government and other citizens, transactional efficiency, and participation in governance.”²⁹⁵ The FCC received responsive comments from the public through the summer of 2009 and, pursuant to the Recovery Act, will produce a national broadband plan for Congress by March 2010.²⁹⁶

Through this invitation for comment, the FCC has evinced an interest in systematically addressing civic participation in Internet governance in ways that policymaking in the area simply has not for the past four decades. The post-Recovery Act attention to civic participation, in this light, is a welcome renewal of a historic approach. The FCC today understands that a dynamic communications platform like the Internet ought to be used to encourage civic engagement; communications are sufficiently vital to democratic self-government that policymakers ought to make all efforts to maximize opportunities for public deliberation without compromising other constitutional priorities (i.e., free speech). Emergent broadband service presents a wonderful (and perhaps even exceptional)

290. See *Broadband NOI*, *supra* note 17, at paras. 37-51.

291. See *id.* at para. 9. The FCC expressed an interest in all of the following “public interest goals”: “consumer welfare, civic participation, public safety and homeland security, community development, health care delivery, energy independence and efficiency, education, worker training, private sector investment, entrepreneurial activity, job creation and economic growth, and other national purposes.” *Id.*

292. Cyber security is one such consideration. Recent attacks on Internet sites operated by the U.S. government make clear that national security is one of the most important considerations for policymakers. In May 2009, President Obama publicized his administration’s efforts to secure the Internet from cyberterrorism. Ellen Nakashima, *Obama Set To Create a Cybersecurity Czar with Broad Mandate*, WASH. POST, May 26, 2009, at A04. See generally ZITTRAIN, *supra* note 23, at ch. 3.

293. See *Broadband NOI*, *supra* note 17, at para. 70.

294. *Id.*

295. *Id.*

296. Joelle Tessler, *FCC Seeks Extension for National Broadband Plan*, YAHOO! NEWS Jan. 7, 2010, http://news.yahoo.com/s/ap/20100107/ap_on_hi_te/us_tec_fcc_broadband.

opportunity because, appropriately deployed, it might afford citizen-users opportunities for unprecedented levels of civic engagement.²⁹⁷

However, to achieve even this, I argue in this Part, policymakers, at a minimum, ought to promulgate firm mandates explicitly requiring that Internet policy help achieve republican ends. Broadband law and policy today do no such thing. In Part IV.A, I analyze and then critique the prevalent civic republican argument for public-minded communications policy reform.²⁹⁸ As an initial matter, I explain, its proponents' argument for creating online forums for public deliberation on issues of common concern is inconsistent with the workings of the extant architecture of broadband. In Part IV.B and C, I review civic republican proposals for substantive regulation of the Internet, including provisions in the example of the 1927 Radio Act.²⁹⁹ These, I argue, are rife with practical problems. But, I explain, they nevertheless offer useful insight into the public-minded priorities broadband policy ought to take into account today. I conclude this Part with sketches for reform. The current policy of liberal deference is lacking, I argue, because it is not public-regarding.³⁰⁰ Policymakers ought to incorporate rulemaking mechanisms by which the public's interest in broadband policy gets a formal hearing.

A. *Civic Republicanism*

1. The Theory

Civic republicanism recommends specific substantive objectives for communications law and policy: to wit, legitimation and social cohesion. Writing in this vein, Ellen Goodman has asserted that communications policy should consider “what democracy needs,” including “common exposure to a broad array of ideas and public elevation through excellence in programming.”³⁰¹ Government can accomplish this by encouraging the creation of what Cass Sunstein has called “general interest intermediaries”³⁰² or what Dawn Nunziato calls “interstitial public

297. I put aside the economic and civic benefits that would accrue in the event the FCC pursues a strategy of deploying “ultra-high speed” broadband service. Sarah Jacobsson, *FCC Wants High-Speed Internet for the Masses*, PC WORLD (Feb. 17, 2010), available at http://www.pcworld.com/article/189549/fcc_wants_highspeed_internet_for_the_masses.html.

298. See *infra* Part IV.A.

299. See *infra* Part IV.B.

300. I do not discuss here the more general arguments against private-public policymaking arrangements or the delegation of rulemaking authority to self-regulatory organizations.

301. Ellen P. Goodman, *Media Policy Out of the Box: Content Abundance, Attention Scarcity, and the Failures of Digital Markets*, 19 BERKELEY TECH. L. J. 1389, 1405 (2004).

302. CASS R. SUNSTEIN, *REPUBLIC.COM 2.0* 8 (2007) (emphasis omitted).

forums.”³⁰³ These public spaces ought to be devoted to unimpeded deliberation between all citizens on matters of common concern.³⁰⁴ There, citizens with differing views can root out “noxious” ideas and discover something approximating the truth.³⁰⁵ This does not mean that everyone is entitled to share or express their views.³⁰⁶ Governments, rather, should simply make available a forum in which citizens may discuss anything, especially shared resources and spaces like schools and policing.³⁰⁷ Some have, in the age of the Internet, argued for “a national virtual public square” for “access to common facts for arguments” to do precisely this.³⁰⁸ Conducted in this way, inclusive rational critical debate could help accomplish important public goals, including the legitimization of substantive law (on schools or policing) and social cohesion.

2. Case Study: The Postal System

Congress created the U.S. Postal Service, for example, to realize these republican ideals.³⁰⁹ Congress’s innocuous constitutional authority under Article I of the Constitution to “establish Post Offices and post Roads” was plain enough,³¹⁰ but to the Founders it signaled much more. The Founders believed that there was something politically and culturally vital in having an elaborate national infrastructure for information distribution.³¹¹ An effective postal system could institutionalize the republican principles that had inspired the political revolutions of the seventeenth and eighteenth centuries in the United States and much of western Europe.³¹² The Postal

303. Dawn C. Nunziato, *The Death of the Public Forum in Cyberspace*, 20 BERKELEY TECH. L. J. 1115, 1147 (2005).

304. Cf. ALEXANDER MEIKLEJOHN, *FREE SPEECH: AND ITS RELATION TO SELF-GOVERNMENT* 22 (2004).

305. *Whitney v. California*, 274 U.S. 357, 375 (1927) (Brandeis, J., concurring). These concepts, of course, are not original to Justice Brandeis. They are fundamental to classic political liberalism. See generally JOHN STUART MILL, *ON LIBERTY* ch. 2 (1921).

306. MEIKLEJOHN, *supra* note 304, at 22-23.

307. See Alexander Meiklejohn, *The First Amendment Is an Absolute*, 1961 SUP. CT. REV. 245, 255 (1961); see also MEIKLEJOHN, *supra* note 304, at 22.

308. See, e.g., Benton Foundation, FCC Staff Workshop on Broadband and E-Gov/Civic Engagement, <http://www.benton.org/node/26944> (last visited Feb. 23, 2010) (quoting an unnamed “FCC staffer”).

309. See RICHARD R. JOHN, *SPREADING THE NEWS: THE AMERICAN POSTAL SYSTEM FROM FRANKLIN TO MORSE* 12-13 (1995).

310. U.S. CONST. art. I, § 8, cl. 7.

311. See Richard B. Kielbowicz, *Preserving Universal Postal Service as a Communication Safety Net: A Policy and Proposal*, 30 SETON HALL LEGIS. J. 383, 393-94 (2006).

312. See JOHN, *supra* note 309, at 12-13. The printing press had occasioned, among other things, one of the most enduring antiauthoritarian movements in modern western history by unsettling the authority of the Catholic Church. See ELIZABETH L. EISENSTEIN, *THE PRINTING PRESS AS AN AGENT OF CHANGE: COMMUNICATIONS AND CULTURAL TRANSFORMATIONS IN*

Service, supporters also argued, could enable communications in civil society to thrive free from the commands of government or the ruthless demands of the market.³¹³

The Founders believed that a properly functioning postal system would be key to the operation of democracy. With the 1792 Postal Act, legislators transformed the innocuous constitutional provision into a substantial social program that ensured “access to information on public affairs” for the “entire population.”³¹⁴ It “admitted newspapers into the mail on unusually favorable terms,” prohibited public officials from monitoring citizens’ mail, and “established a set of procedures that facilitated the extraordinarily rapid expansion of the postal network.”³¹⁵ The revenues generated from point-to-point letter mailing between merchants would subsidize newspaper circulation.³¹⁶ In retrospect, these were significant innovations; this legislation “hastened the establishment of a national market,” fostered the proliferation of nationally oriented voluntary associations, created the technical preconditions for the rise of the mass political party, and encouraged a far-flung population to conceive of themselves as Americans—and, in so doing, shaped an emergent American national identity.³¹⁷

3. Republicanism and the Internet

At the core of the civic republican argument as it is applied to the Internet, however, is a concern that the emergent digital media, in particular, are fracturing the public into silos of narrow parochial interest.³¹⁸ The public will dissipate as its members are increasingly less likely to share the “unanticipated encounters” supplied by, say, the cover or op-ed pages of the popular local newspaper.³¹⁹ Democracy, however,

EARLY-MODERN EUROPE (1979). It played a defining role, moreover, in the proto-democratic political revolutions in England and France in the sixteenth and eighteenth centuries. See BENEDICT ANDERSON, *IMAGINED COMMUNITIES* 60-61 (1983); ROBERT DARNTON, *GEORGE WASHINGTON’S FALSE TEETH: AN UNCONVENTIONAL GUIDE TO THE EIGHTEENTH CENTURY* (2003).

313. See 2 JOSEPH STORY, *COMMENTARIES ON THE CONSTITUTION* § 1120 (1873).

314. JOHN, *supra* note 309, at 33, 149.

315. *Id.* at 31.

316. *Id.* at 18.

317. *Id.* at 29, 56, 282.

318. PUTNAM, *supra* note 249, at 177-79. See also Shanto Iyengar & Kyu S. Hahn, *Red Media, Blue Media: Evidence of Ideological Selectivity in Media Use*, 59 J. COMM. 19 (2009).

319. See SUNSTEIN, *supra* note 302, at 31. See also Ben Van Heuvelen, *The Internet Is Making Us Stupid*, SALON, Nov. 7, 2007, <http://www.salon.com/news/feature/2007/11/07/sunstein/>; Paul Starr, *Goodbye to the Age of Newspapers (Hello to a New Era of Corruption)*, THE NEW REPUBLIC, Mar. 4, 2009, <http://www.tnr.com/article/goodbye-the-age-newspapers-hello-new-era-corruption>. Repositories of publicly relevant information,

depends on the existence of an engaged public capable of subjecting a diversity of pressing and sometimes unfamiliar common problems against the light of public reason. Or, as Sunstein recently put it, democracy requires “a kind of architecture of serendipity—that is, a situation in which we will have a number of serendipitous encounters with topics and points of view. These encounters can have a large impact; sometimes they can even change our lives.”³²⁰ These serendipitous shared moments are lost on the Internet, Sunstein and others argue, because the technology allows users to attend to their own respective personal preferences and not the public good.³²¹

For many, the republican values undergirding the First Amendment recommend the creation of online public forums in which participants may share experiences without intrusions from network owners, broadband service providers, third-party advertisers, or governments.³²² Civic republicanism in this form, however, is a speculative extrapolation of what the Constitution affirmatively requires. Its undoing is the text of the First Amendment itself, which, after all, only guards against governmental

like newspapers, assemble, in Todd Gitlin’s words, an “accidental public” around stories, features and even comics that, in turn, articulate social priorities. Todd Gitlin, Keynote Speech at the University of Westminster, London; A Surfeit of Crises: Circulation, Revenue, Attention, Authority, and Deference (May 19, 2009), available at <http://www.westminsternewsonline.com/wordpress/?p=1951>. But newspapers are increasingly suffering from the creative destruction wrought by the Internet. Cf. Schumpeter. SCHUMPETER, *supra* note 273, at 84. Devastating declines in circulation, readership, cultural authority, and the holy grail of advertising revenue for even the largest of newspaper companies, including major metropolitan papers, like *The Los Angeles Times*, *The Boston Globe*, *The Sacramento Bee*, *The Miami Herald*, and *The Newark Star-Ledger*, could all be attributed almost directly to the emergence of free online classified sites, like CraigsList and Roommates.com, that provide subscribers with unprecedented opportunities to negotiate over goods and services with each other and, to a lesser extent, specialized sports and news sites. The absence of newspapers, according to one view, could have perilous consequences for democracy and government accountability. Paul Starr, *Goodbye to the Age of Newspapers (Hello to a New Era of Corruption)*, THE NEW REPUBLIC, Mar. 4, 2009, available at <http://www.npr.com/article/goodbye-the-age-newspapers-hello-new-era-corruption>. See also Tim Arango, *Death Row Foes See Newsroom Cuts as Blow*, N.Y. TIMES, May 21, 2009, at A3.

320. CASS SUNSTEIN, GOING TO EXTREMES: HOW LIKE MINDS UNITE AND DIVIDE 80 (2009) (emphasis omitted).

321. See, e.g., *id.*

322. Public-interest advocacy groups, like the Media Access Project (MAP), for example, responded to the FCC’s invitation for comment on a national broadband plan by arguing that the FCC ought “to give priority to First Amendment values.” MAP asked the FCC to “take an expansive view about the role of government to promote and enhance the marketplace of ideas through policies including, but not limited to, non-discrimination in network management and interconnection.” Press Release, Media Access Project, Media Access Project Asks FCC To Prioritize First Amendment Values in Developing National Broadband Plan (June 8, 2009), available at <http://www.mediaaccess.org/press-room/media-access-project-asks-fcc-to-prioritize-first-amendment-values-in-developing-national-broadband-plan> (full comments are available at this link).

abridgement of speech,³²³ it does not even suggest how forums for public deliberation ought to be structured. This is not to say that the provision as interpreted by the courts does not, in some circumstances, recommend affirmative (i.e., not proscriptive) governmental obligations. The case of designated public forums is an obvious example. It only suggests, at a minimum, that neither the First Amendment nor civic republicanism more generally provides specific guidance on what affirmative governmental interventions should look like as a matter of course. Something akin to the unequivocal constitutional and statutory authorities on which policymakers created the postal system would be required.

In any event, classic republicanism is incompatible with the real life workings of deliberation. Notwithstanding efforts by German social theorist Jürgen Habermas to develop practical discourse ethics,³²⁴ it is not at all clear that public deliberation actually ever existed in as storied a way as contemporary proponents presume—in salons, town halls, televised debates, or the op-ed pages of the local paper.³²⁵ In this light, the rise of the Internet and the demise of the modern mass media (e.g., “Big Three” network broadcasters and major metropolitan newspapers) do not necessarily foretell the dissolution of the public or the end of democracy because, quite simply, the public never assembled in the ways that republicans envision. Social transformations have been instigated generally by movements which cluster around particular problems and then fade as

323. See Balkin, *supra* note 247, at 934-35 (discussing Jerome Barron’s argument that First Amendment addresses private suppression of speech); Beth S. Noveck & David R. Johnson, *Society’s Software*, 74 *FORDHAM. L. REV.* 469, 488 (2005) (“We will still need the First Amendment (and we will still wish for something like it to arise in a global context), but we will do well also to focus on assuring the evolution of socially empowering versions of the code that administers group roles and the screens that make groups visible.”).

324. See JÜRGEN HABERMAS, *BETWEEN FACTS AND NORMS: CONTRIBUTIONS TO A DISCOURSE THEORY OF LAW AND DEMOCRACY* (William Rehg trans., 1996). According to Habermas’s earliest published formulation, a vibrant public sphere (i.e., the metaphorical space for public deliberation in civil society divorced from the forums of government decision-making and commercial market exchange) requires three structural criteria in order to thrive: first, social status must have no bearing on a person’s ability to participate in discussion; second, all matters of common concern may be the subject of discussion; and, third, no “clique” of private citizens could presume to have the authority to speak on behalf of the public because all members of the polity comprise the public in fact. See JÜRGEN HABERMAS, *THE STRUCTURAL TRANSFORMATION OF THE PUBLIC SPHERE: AN INQUIRY INTO A CATEGORY OF BOURGEOIS SOCIETY* 36-37 (Thomas Burger trans., 1989).

325. See Michael Schudson, *Was There Ever a Public Sphere? If So, When? Reflections on the American Case*, in *HABERMAS AND THE PUBLIC SPHERE* 143 (Craig Calhoun ed., 1999). Disfavored groups, for example, were often excluded from discussion of public matters. Nancy Fraser, *Rethinking the Public Sphere: A Contribution to the Critique of Actually Existing Democracy*, in *HABERMAS AND THE PUBLIC SPHERE* 109 (Craig Calhoun ed., 1999).

contingencies change.³²⁶ At best, the public and its members are moved to action as a matter of circumstance and contingency.

Some Web sites and online curatorial conventions might nominally resemble the celebrated central forums envisioned by classic civic republicans,³²⁷ but, in fact, they are nothing like them.³²⁸ Most site editors or application programmers do not conceive of themselves as clearinghouses for all questions of common concern. The unaffiliated content to which political blogs, for example, invite users to hyperlink is rarely representative of all perspectives on a subject area, and, in most cases, site editors do not even pretend that they are.³²⁹ To the contrary, with the possible exception of exceedingly popular sites like Google's search engine and Wikipedia, most online services and applications self-consciously link to sites that share views about particular subjects at the exclusion of others.³³⁰ And, for what it is worth, the open network design presumes that no one service, forum, or user should or even could be the central repository of all available information.³³¹ In any event, much more often than not, the subject of online chatter and networking in these forums (as is the case in most other offline forums) does not concern itself with the pressing matters of common concern. Their subject matter tends to be more personal or adamantly parochial than public. At best, debates about matters of common concern tend to be sublimated in, say, quotidian blog entries about adulterous politicians or the First Lady's coiffure.

Civic republicanism, moreover, is not so easy to implement through public law. Historically, policymakers have promulgated a variety of ownership and content-based rules ostensibly in order to ensure that, for example, broadcasters with coveted government-awarded licenses use the electromagnetic spectrum in the "public interest."³³² Through these license terms, policymakers have imposed duties on broadcasters, including requirements to attend to public matters in programming and providing

326. See generally WALTER LIPPMANN, *THE PHANTOM PUBLIC* (1925); CHARLES TILLY, *SOCIAL MOVEMENTS, 1768-2004* (2004).

327. For example, see Townhall.com, <http://townhall.com> (last visited Feb. 23, 2010), or Salon.com, <http://salon.com> (last visited Feb. 23, 2010).

328. Cass R. Sunstein, *Neither Hayek Nor Habermas*, 134 *PUB. CHOICE* 87 (2008).

329. See Han Woo Park, Mike Thelwall & Randolph Kluver, *Political Hyperlinking in South Korea: Technical Indicators of Ideology and Content*, *SOC. RES. ONLINE*, Sept. 30, 2005, at para. 2.3, available at <http://www.socresonline.org.uk/10/3/park.html>.

330. *Id.*

331. See IETF, *Mission Statement*, <http://www.ietf.org/about/mission.html> (last visited Feb. 23, 2010).

332. See *Red Lion Broad. Co., Inc. v. FCC*, 395 U.S. 367, 385 (1969). Ownership rules have, to a certain extent, also sought to do as much. These, however, tend to revert quite quickly to classic antitrust concepts and measures. *Prometheus Radio Project v. FCC*, 373 F.3d 372, 402-412 (3d Cir. 2004) (discussing HHI index).

editorial balance on political questions.³³³ Both kinds of obligations were meant to implement, no matter how clumsily, the civic republican ambition to encourage public deliberation on problems of common concern.³³⁴ Other provisions have imposed editorial restrictions on airing content that “lacks serious literary, artistic, political, or scientific value” on the assumption that some matters are worth more public attention and protection than others.³³⁵ Many of these provisions have since been substantially revised³³⁶ or altogether repealed because of the glaring constitutional problems they raise in today’s effluent media environment.³³⁷ A few others have not.³³⁸ Policymakers also have regulated the content of MVPDs by obliging them, for example, to carry local public, educational, and government-related programming as well as making production studio space available for leasing by unaffiliated programmers.³³⁹ While some of these obligations remain law, it is unclear whether they have achieved the objectives Congress set out for them.³⁴⁰ In any event, in both the case of broadcasters and MVPDs, policymakers have promulgated explicit measures to ensure that they somehow account for the uniquely pervasive and public nature of their programming.³⁴¹

Civic republicanism is even more difficult to implement through regulation on the Internet.³⁴² After all, the federal courts have generally assented to this point, rejecting most of Congress’s attempts even to protect children from indecency and obscenity.³⁴³ Indeed, the Supreme Court has

333. See, e.g., *Red Lion*, 395 U.S. 367, 385 (1969).

334. *Red Lion*, 395 U.S. at 385; *NBC*, 319 U.S. at 217-18.

335. *FCC v. Pacifica Found.*, 438 U.S. 726, 767 n.2 (1978) (citing *Miller v. California*, 413 U.S. 15, 24 (1973)).

336. See 1993 Amendments to 47 U.S.C. § 309 (2006) (Pub. L. 103-66, Title VI, § 6002(a), (b)(1), 107 Stat. 387, 392).

337. *Syracuse Peace Council v. FCC*, 867 F.2d 654 (D.C. Cir. 1989).

338. See, e.g., *FCC v. Fox Television Stations*, 129 S. Ct. 1800, 1819 (2009).

339. See *Turner Broad. Sys., Inc. v. FCC (Turner II)*, 520 U.S. 180, 180-81 (1997); *Turner Broad. Sys., Inc. v. FCC (Turner I)*, 512 U.S. 622 (1994). They did this even as cable operators in the late 1970s collaborated without direction from policymakers to create C-SPAN, a channel carried by all MVPDs that is devoted entirely to airing policy happenings in the Capitol and around the country.

340. See Theodore Bolema, MACKINAC CTR. FOR PUB. POL’Y, *An Evaluation of Legislative Proposals for Higher Cable Fees To Finance Public Education and Government Access Channels* 8 (2008), available at <http://www.mackinac.org/archives/2008/2008-11REGfeesWEB.pdf>.

341. See, e.g., *FCC v. Fox*, 129 S. Ct. at 1812-13 (upholding FCC rule barring fleeting expletives on broadcast television); *Turner II*, 520 U.S. at 189-90; *Turner I*, 512 U.S. at 646.

342. See CARLISS Y. BALDWIN & KIM B. CLARK, *DESIGN RULES: THE POWER OF MODULARITY* (2000); Neuchterlein, *supra* note 39, at 38; Varona, *supra* note 235, at 121.

343. Through the CDA, for example, Congress sought to limit minors’ exposure to indecency and obscenity on the Internet, again, on the assumption that some content is literarily, artistically, politically, or scientifically more valuable than others.

espoused a triumphalist conception of the Internet, explaining in 2003 that content regulation of the “vast democratic forums of the Internet” could not be justified in the same way it had been for content restrictions on broadcasting, cable programming, and telephone use.³⁴⁴ Unlike those other media, the Court elaborated, “content on the Internet is as diverse as human thought.”³⁴⁵ As the result of the Court’s stubborn resistance to Internet content regulation, many observers have simply concluded that federal regulation of indecency and obscenity on the Internet is forever dead.³⁴⁶

But, as the Internet matures, the federal courts have made exceptions. In 2003, for example, the Supreme Court held that a statute conditioning federal funding to public libraries on the use of Internet filtering software did not violate the First Amendment.³⁴⁷ Through the Children’s Internet Protection Act (CIPA), Congress sought to block pornographic material from minors who use computers at public libraries.³⁴⁸ While the provisions at issue in *Reno v. ACLU* unlawfully intruded on adults’ right to access the Internet in private, the Court explained, CIPA was a valid exercise of Congress’s power to protect minors from “harmful” “visual depictions” at federally funded public libraries.³⁴⁹ Through such federal funding, public libraries “facilitate research, learning, and recreational pursuits by furnishing materials of requisite and appropriate quality.”³⁵⁰ Access to pornography falls outside of the range of materials and services that are at the core of what public libraries provide—certainly at the periphery of what classic republicanism requires.³⁵¹ Congress was acting within its authority

Communications Decency Act of 1996, Pub. L. No. 104-104, § 509, 110 Stat. 137 (codified at 47 U.S.C. § 230). Legislators were ostensibly concerned about the proliferation of sexually explicit content, believing that content of this kind could sully the new medium for young people in particular. Peter H. Lewis, *Free Speech Case*, N.Y. TIMES, June 13, 1996, at A1, B10. The Supreme Court promptly struck down the “indecent transmission” and “patently offensive display” provisions in *Reno v. ACLU*, holding that, as written, the provisions substantially burdened the protected speech rights of adults. 521 U.S. 844, 858-59 (1997). Congress’s most recent attempt to regulate Internet content in the name of children was recently struck down by the Third Circuit. *ACLU v. Mukasey*, 534 F.3d 181 (3rd Cir. 2008) (striking down Children’s Online Protection Act).

344. *Reno*, 521 U.S. at 868.

345. *Id.* at 870 (quoting *ACLU v. Reno*, 929 F. Supp. 824, 842 (E.D. Pa. 1996)).

346. Scott Nichols, COPA Child Porn Law Killed, PCWorld, Jan. 22, 2009, http://www.pcworld.com/article/158131/copa_childporn_law_killed.html; Mark Sherman, Anti-Porn Online Law Dies Quietly in Supreme Court, S.F. Chron., Jan. 21, 2009, available at <http://www.sfgate.com/cgi-bin/article.cgi?f=/n/a/2009/01/21/national/w070751S14.DTL&feed=rss.news>.

347. *United States v. Am. Library Ass’n*, 539 U.S. 194 (2003).

348. *Id.* at 200-01.

349. *Id.* at 201.

350. *Id.* at 206.

351. *Cf. Meiklejohn, The First Amendment Is an Absolute*, *supra* note 307, at 255, 258.

when it passed CIPA because of the special, civic-minded objectives of public libraries.

More recently, the Ninth Circuit, sitting en banc, held that the safe-harbor provision in Section 230 that immunizes Web sites and other Internet services from liability for the actions of third parties does not apply to sites and services that actively solicit subscriber information in violation of the Fair Housing Act.³⁵² In that case, a prominent site devoted to online classified advertisements for housing requested information about subscribers' gender, sexual orientation, and marital status as well as their preferences for kinds of renters or buyers.³⁵³ By actually requiring subscribers to provide this information, the court explained, Roommates.com was not the passive intermediary contemplated under Section 230.³⁵⁴ Instead, it effectively required subscribers to discriminate on the basis of characteristics that the FHA explicitly proscribes.³⁵⁵ "Internet," the court explained, "is no longer a fragile new means of communication that could easily be smothered in the cradle of overzealous enforcement of laws and regulations applicable to brick-and-mortar businesses."³⁵⁶ Bigotry exists on the Internet as it does in the physical world, and, but for civil-rights enforcement against certain kinds of speech, anonymity, pseudonymity, and near-unrestrained user freedom would allow it to thrive. The public objectives of the civil-rights laws outweighed any pretensions about the exceptionalism of the Internet.

B. Participatory Governance

Despite jurisprudential limitations on Internet content regulation, the decisions in the FHA and CIPA cases beg the following question: can policymakers and courts continue to delegate the administration of Internet policy to nongovernmental self-regulatory organizations or otherwise refrain from Internet regulation altogether when, at least in those two exemplary cases, the argument for a blanket immunity has been rejected?³⁵⁷ The cases suggest that, even as applied to the Internet's content, public laws hardly acquire their legitimacy solely on the basis of the ostensible

352. *Fair Housing Council v. Roommates.com*, 521 F.3d 1157 (9th Cir. 2008).

353. *Id.* at 1161.

354. *Id.* at 1166.

355. *Id.* at 1164-65.

356. *Id.* at 1164 n.15. The Ninth Circuit also recently limited the scope of Section 230 by holding that an Internet Service Provider (ISP) could not claim immunity when it breached a contractual promise to a subscriber to remove defamatory information not posted by the subscriber from a Web site run by the ISP. *Barnes v. Yahoo!, Inc.*, 570 F.3d 1096 (9th Cir. 2009).

357. *Cf.* Reidenberg, *supra* note 120, at 1956 (describing the "evolution from a somewhat naïve view of the Internet to a rejection of the Internet activists' simple denial of law").

expertise from which they are generated. Rather, in those cases and pursuant to the participatory governance theory I espouse here, the public laws in question obtained their legitimacy, above all, from the democratically legitimated political processes from which they emerged and the constitutionally affirmed normative priorities necessary for the conduct of civic life. After all, the Ninth Circuit held that the FHA provision barring landlords from eliciting information in order to discriminate against potential renters on the basis of race, gender, or family size was a valid abridgement of speech because it advances another compelling constitutional goal: to wit, equal protection.³⁵⁸ The Court in the CIPA decision, similarly, upheld the constitutionality of the funding condition on the grounds that Congress was within its proper authority to impose filtering obligations on recipients of federal funding.³⁵⁹ Public libraries, it explained, serve a core curatorial role in the operation of democratic self-government.³⁶⁰

Participatory governance theory does not concern itself so much with the structure, content, or virtue of deliberative forums. Its concerns are with whether and how the constituencies comprising the public ought to participate in law and policymaking or, more modestly, whether their interests are adequately represented in such law and policymaking.³⁶¹ This focus, I argue, ought to be systematically applied to broadband policymaking for three overlapping reasons: (1) normatively, republican theory requires something more than liberal deference; (2) as a matter of historical fact, communications policymaking has been addressed to the public; and (3) addressing communications policymaking to the conduct of civic life has an educative function quite apart from the moral ambitions of republican theory. Before addressing each, I outline the essentials of participatory governance theory.

358. Surely, on these grounds, we can imagine several legislative interventions that, in spite of the exceptions in the statutory provision at issue, *see* 47 U.S.C. § 230(e) (asserting that nothing in the statute impairs enforcement of criminal law, intellectual property law, state law that is not inconsistent with the statute generally, and privacy law), would effectively render Section 230 immunity obsolete.

359. *United States v. Am. Library Ass'n*, 539 U.S. 194 (2003).

360. *Id.* at 206.

361. Cary Coglianese, et al., *Transparency and Public Participation in the Federal Rulemaking Process: Recommendations for the New Administration*, 77 GEO. WASH. L. REV. 924, 926 (2009); Archon Fung, *Varieties of Participation in Complex Governance*, PUB. ADMIN. REV., Dec. 2006, at 66; Archon Fung & Erik Olin Wright, *Deepening Democracy: Innovations in Empowered Participatory Governance*, 29 POLS. & SOC'Y 5 (2001).

1. The Theory

Transparency and public participation confer democratic legitimacy on law in ways that even the most well-meaning experts and nongovernmental organizations cannot. These principles also enhance policymakers' ability to produce regulatory decisions of superior quality.³⁶² Legitimacy matters all the more in communications policymaking because expressive acts can influence the subsequent electoral, political, and substantive policy choices citizens make. The legitimacy of any communications law, therefore, is contingent on the extent to which it is addressed to or overtly considers its impact on civic life. As a matter of governance, processes for communications policymaking should always be expressed in the first instance by publicly legitimated decision-making institutions. This is especially apt for a communications medium as pervasive as the Internet.

But liberal deference, at least as it has been articulated by its most prominent supporters, does not presume as much.³⁶³ To the contrary, it would leave first-instance rulemaking to expert nongovernmental organizations and firms that are avowedly opposed to centralized administration. Of course, private self-regulatory organizations, like the IETF, are far better at developing technical standards for an industry as technologically dynamic as that for broadband service. But policymakers should not import IETF engineering principles into communications policy for their own sake. Decentralization, for example, might be a powerful engineering principle for transmission, but this does not mean it ought to be a prerequisite for substantive broadband policy qua communications policy. Nor, more specifically, is it particularly probative of the dispute about what constitutes reasonable network management. Questions about when or even whether decentralization should be a priority are, above all, political and contestable; as a matter of policy, there is nothing particularly reasonable about broad nondiscrimination rules on the one hand or minimalist antitrust rules on the other. As such, the meaning of decentralization for regulation should be subject to the publicly legitimated institutions long established to address political and uniquely public problems. By analogy, we would never ask civil engineers alone to formulate rules in the first instance about whether or when to put up traffic lights near a school. This is a concern that we submit to elected officials, city planners, parents, and school officials, notwithstanding their own self-interested rational choice, in order to ensure

362. Coglianese, et al., *supra* note 361, at 927; Jody Freeman, *Annual Regulation of Business Focus: Privatization*, 52 ADMIN. L. REV. 813, 848 (2000).

363. See *Comcast Order*, *supra* note 6, at 13090-93 (statement of Comm'r Robert M. McDowell, dissenting); Weiser, *supra* note 2, at 576; Werbach, *supra* note 2, at 217-20.

the traffic patterns to which all stakeholders agree are consistent with overarching educational goals.³⁶⁴

2. Case Study: Broadcasting

The question about how or whether to address the interests of the public explicitly in communications policymaking is not new. And, if the prominence of the public-choice critique is any indication, the verdict is in: it is practically impossible to impose enduring public-minded requirements that can withstand regulatory capture and the influence of self interest.³⁶⁵ Policymaking in the area of broadcast communications in particular has been prone to capture by the parochial self interests of politicians and major stakeholders in large measure through the vaguely phrased ambition to address communications policymaking to the public.³⁶⁶ Critics of centralized governmental command-and-control policymaking procedures ostensibly addressed to the public argue that the price mechanism in a minimally regulated market is almost always the more efficient and objective measure of the public's preferences.³⁶⁷ Indeed, in the case of twentieth-century broadcasting, scholars have shown quite persuasively that the price mechanism (in competitive bidding, for example) can be a far more efficient adjudicator of rights to use of the electromagnetic spectrum.³⁶⁸ Broadcasters in a competitive environment are guided by consumer demand and their own objective costs, and not the shifting subjective priorities of central government planners.³⁶⁹ In this light, the

364. Contemporary concerns in broadband policy that, for example, we would never have resolved by nongovernmental standard setters include questions over Internet access, law enforcement access to private information, public education, literacy, and which, if any, uses ought to be encouraged or even subsidized. There is nothing about these policy concerns that require the kind of expertise, resources, and institutional motives of the IETF or network owners and service providers. Nevertheless, there is not yet any clear or consistent federal mandate on any of these.

365. See Frank I. Michelman, *Political Markets and Community Self-Determination: Competing Judicial Models of Local Government Legitimacy*, 53 *IND. L.J.* 145, 148-49 (1978); Posner, *supra* note 248; STIGLER, *supra* note 248.

366. See Thomas Hazlett, Comment, *Oak Leaves and the Origins of the 1927 Radio Act*, 95 *PUB. CHOICE* 277, 278-79 (1998).

367. See Coase, *supra* note 278, at 18-19; Thomas W. Hazlett, *Assigning Property Rights to Radio Spectrum Users: Why Did FCC License Auctions Take 67 Years?*, 41 *J.L. ECON.* 529 (1998); Evan Kwerel & Alex D. Felker, *Using Auctions to Select FCC Licensees* (FCC, Working Paper No. 16, 1985).

368. See Kwerel & Felker, *supra* note 367.

369. See Coase, *supra* note 278, at 18. See also R. H. Coase, *Evaluation of Public Policy Relating to Radio and Television Broadcasting: Social and Economic Issues*, 41 *LAND ECON.* 161 (1965). The FCC's system of rationing licenses, Ronald Coase prophetically offered, should be replaced by a bidding process that requires spectrum applicants to compete through price for rights in the spectrum. See Coase, *supra* 278, at 18-19. What is more, even if engineers and broadcasters believed that a "saturation point had been reached," there were market-based alternatives to selective licensing by bureaucrats. See

regulatory regime that Congress created in 1927 and more or less affirmed verbatim in the 1934 Act was an ignoble quid pro quo between politicians and powerful commercial interests.³⁷⁰ Broadcasters obtained exclusive rights to use spectrum frequencies ostensibly in the public's interest for the price of political gain, not their true value.³⁷¹

The public-choice critique, however, does not explain why reformers in the mid-1920s, whether well-meaning or otherwise, believed that a public licensure regime was a necessary legislative intervention. After all, from 1919 to 1927, the major stakeholders in the industry (e.g., radio manufacturers, retail stores, broadcast station owners, and programmers) already had developed among themselves conventions in intellectual property protection in transmitter and receiver technologies, network affiliate ownership structures, and (collusive) corporate governance arrangements.³⁷² The big players, in other words, already controlled the playing field and were proceeding in perfect contentment to organize things by mutual private agreement. Concerns about technical interference and institutional order—let alone desires for raw political power—were therefore unlikely to have made the 1927 Radio Act inevitable.

Nor, to be more precise, did natural frequency scarcity require Congress to create a Federal Radio Commission whose charge was to award licenses on the basis of the “public interest, convenience, and necessity.” The limited technical design of transmitters and receivers did certainly compound the problem of interference in the mid-1920s.³⁷³ But

ITHIEL DE SOLA POOL, *TECHNOLOGIES OF FREEDOM* 113 (1983). By the mid-1920s, all stakeholders understood that technological innovation would make more of the spectrum available to more users. *Id.* at 113-14.

370. See Glen O. Robinson, *The Federal Communications Act: An Essay on Origins and Regulatory Purpose*, in *A LEGISLATIVE HISTORY OF THE COMMUNICATIONS ACT OF 1934*, 3, 13-14 (Max D. Paglin ed., 1989); Coase, *supra* note 278, at 18; Hazlett, *supra* note 366, at 278-79.

371. See Coase, *supra* note 278, at 19. Even today's progressive critics have taken up this critique to argue that early media reformers were quite right to be concerned about private industry's capture of federal spectrum policy. See, e.g., ROBERT BRITT HORWITZ, *THE IRONY OF REGULATORY REFORM: THE DEREGULATION OF AMERICAN TELECOMMUNICATIONS* 20-21, 116-17 (1989); ROBERT W. MCCHESENEY, *TELECOMMUNICATIONS, MASS MEDIA, & DEMOCRACY: THE BATTLE FOR THE CONTROL OF U.S. BROADCASTING, 1928-1935* (1993); HUGH R. SLOTTEN, *RADIO AND TELEVISION REGULATION: BROADCAST TECHNOLOGY IN THE UNITED STATES, 1920-1960* (2000).

372. Gleason L. Archer, *Big Business and Radio* (New York: American Historical Company 1939), 7-8, 195; *Report of the Federal Trade Commission on the Radio Industry in Response to House Resolution 548*, 67th Congress, Fourth Session (Dec. 1, 1923), 14-15, Appendices D, E, F.] See also ERIK BARNOUW, *A TOWER IN BABEL: A HISTORY OF BROADCASTING IN THE UNITED STATES TO 1933*, 81 (1966). They did this at the expense of amateurs and individual radio enthusiasts.

373. See DE SOLA POOL, *supra* note 369, at 114. *Secretary Hoover Broadcasts His Views on Radio Situation*, N.Y. TIMES, Apr. 13, 1924, at XX17 (quoting Hoover as saying that “[s]ome day, with a greater development of the art, we may use several thousand different

engineers, of course, would improve the technology and reformers knew this.³⁷⁴ Technical rationalization of spectrum, therefore, could not have addressed the interference problem alone. In any case, the courts were employing an emergent first-in-time rule for adjudicating frequency ownership and use; frequency owners could have protected their proprietary interests pursuant to long-standing common-law principles.³⁷⁵ Reformers, moreover, could have looked to the same government-administered regimes for real property disposal of the nineteenth century that would have fallen well short of an elaborate licensure regime.³⁷⁶

The public trustee model was, in fact, a solution for what was as much a social and political problem as a technological or institutional one.³⁷⁷ The preoccupation with interference was part of a more general reaction to the dramatic demographic changes occurring in the wake of the first World War. Many reformers, for example, were keen on making the new broadcasting technologies work, especially for small, isolated rural communities, in spite of rapid urbanization.³⁷⁸ President Calvin Coolidge believed broadcasting could integrate remote small-town America into the cosmopolitan network of modern civilization.³⁷⁹ Similarly, Agriculture Secretary William Jardine, an early pioneer of radio programming for rural audiences, believed radio could deliver “the farmer and his family from the sense of isolation, by coping with class and sectional differences, by keeping boys and girls on the farm, and by making possible a system of agricultural education through the radio-extension courses of the

wave lengths; but today we must keep them a good ways apart, and we have the use of a very limited number”).

374. See DE SOLA POOL, *supra* note 369, at 114. *Secretary Hoover Broadcasts His Views on Radio Situation*, *supra* note 373.

375. The courts made clear that the Department of Commerce was not essential to defining property rights in the spectrum. See *Hoover v. Intercity Radio Co.*, 286 F. 1003 (D.C. Cir. 1923); *United States v. Zenith Radio Corp.*, 12 F.2d 614 (N.D. Ill. 1926); *Chicago Tribune Co. v. Oak Leaves Broad. Station*, Ill. Circuit Ct., Cook County, Nov. 17, 1926, *reprinted in* 68 CONG. REC. 215-19 (1926).

376. We see strikingly similar arguments in the debates about how land should have been disposed by the federal government in the mid-to-late nineteenth century. On the one hand are those who favor using land as a source of revenue for the federal treasury and, on the other hand, those who, in the interest of democratic politics, favor using land as a way of promoting an agrarian democracy. See generally MARION CLAWSON, *MAN AND LAND IN THE UNITED STATES* 65 (1964).

377. See Hugh G. J. Aitken, *Allocating the Spectrum: The Origins of Radio Regulation*, 35 TECHNOLOGY AND CULTURE 695, 713, 716 (1994); DE SOLA POOL, *supra* note 369, at 141.

378. RONALD R. KLINE, *CONSUMERS IN THE COUNTRY: TECHNOLOGY AND SOCIAL CHANGE IN RURAL AMERICA* 2 (2002). See also Melvin T. Copeland, *Marketing*, in 1 *Recent Economic Changes in the United States* 321, 322 (1929).

379. Calvin Coolidge, Address at the Opening Meeting of the International Radiotelegraph Conference (Oct. 4, 1927), available at <http://www.presidency.ucsb.edu/ws/print.php?pid=432>.

agricultural colleges.”³⁸⁰ “Never since the first letter was printed from movable type,” explained the assistant secretary of commerce, “has such a huge stride been taken to make information freely available and to put knowledge and education within the reach of all.”³⁸¹ David Sarnoff, the influential general manager at the Radio Corporation of America, agreed. “The greatest advantage of broadcasting lies,” he testified, “in its universality, in its ability to reach everybody, everywhere, anywhere in giving free entertainment, culture, instruction, and all the items which constitute a program, in doing that which no other agency has yet been able to do.”³⁸²

The paradox of radio broadcasting was that it delivered the benefits as well as the disadvantages of modern urban life. Prominent elites of all political stripes “were haunted by the fears that the new urban, industrial world of mass communications would destroy real community.”³⁸³ The value of radio broadcasting, therefore, could not be “measured,” according to one congressman, merely by its commercial promise.³⁸⁴ “As a means of entertainment, education, information and communication,” radio “could mold and crystallize sentiment” in unprecedented ways.³⁸⁵ There was too much at stake. Listeners, reformers believed, tuned in primarily because they hoped to understand themselves and their communities in an increasingly complex world.³⁸⁶ While policymakers repeatedly rejected attempts by civic groups to include a requirement that twenty-five percent of broadcasters’ programming be educational,³⁸⁷ they also believed that, without carefully managed government intervention, emergent coast-to-coast superstations and chain broadcasting networks would supplant local

380. KLINE, *supra* note 378, at 116-17.

381. S.B. Davis, Assistant Secretary of Commerce, *The Development of Radio Broadcasting*, BOSTON GLOBE, Aug. 26, 1923, at 47.

382. *To Regulate Radio Communication: Hearing on H.R. 7357 Before the Comm. on the Merchant Marine and Fisheries*, 68th Cong. 158 (1924) (testimony of David Sarnoff). We might not doubt Sarnoff’s sincerity on this point if he did not also go as far as to claim that radio would have helped Abraham Lincoln avert the Civil War. *Id.* at 160.

383. WARREN I. SUSMAN, *CULTURE AS HISTORY: THE TRANSFORMATION OF AMERICAN SOCIETY IN THE TWENTIETH CENTURY* 257 (1984). *See also* ELLIS W. HAWLEY, *THE GREAT WAR AND THE SEARCH FOR MODERN ORDER: A HISTORY OF THE AMERICAN PEOPLE AND THEIR INSTITUTIONS, 1917-1933*, at vi., 2, 90, 226 (1997).

384. 67 Cong. Rec. 5557 (1926). (statement of Rep. Johnson). *See also* SUSAN DOUGLAS, *LISTENING IN: RADIO AND THE IMAGINATION, FROM AMOS ‘N’ ANDY AND EDWARD R. MURROW TO WOLFMAN JACK AND HOWARD STERN* 83 (1999).

385. *See* 67 CONG. REC. 5557 (1926) (statement of Rep. Johnson).

386. PAUL STARR, *THE CREATION OF THE MEDIA* 347 (2004); DEREK VAILLANT, *SOUNDS OF REFORM: PROGRESSIVISM AND MUSIC IN CHICAGO, 1873-1935*, 234 (2003).

387. ROBERT W. MCCHESENEY, *supra* note 371, at 102-03.

community life.³⁸⁸ The Radio Act's purpose was to rationalize spectrum use, but, if read in connection with the general mood among policymakers of the day, it also was to shield listeners from the socially disruptive effects of urbanization and modernity. Commerce Secretary Hoover warned that commercial broadcasting needed to be closely monitored as it was "one of the most important of human discoveries bearing on education, amusement, culture and business communication."³⁸⁹ It would be a mistake to presume that it was "merely a business carried on for private gain, for private advertisement or for entertainment of the curious."³⁹⁰ Radio, Hoover explained, "is a public concern impressed with the public trust and to be considered primarily from the standpoint of public interest to the same extent and upon the same basis of the same general principles as our other public utilities."³⁹¹

These sentiments translated into a public licensure regime that, until the 1990s, has required prospective broadcasters to prove their public worth in comparative hearings. Congress implemented an FCC-administered competitive bidding process in 1997 to distribute rights for practically all initial applications (i.e., not for renewal) for use of the electromagnetic spectrum.³⁹² Before then, however, the FCC generally awarded or renewed all licenses to applicants who could demonstrate only that they would attend to the "public interest, convenience, and necessity" in their future programming and operations.³⁹³ In 1927, this standard meant that commissioners would have to take into account the social dimensions of their licensing decisions and not just the technical ones. According to Senator Clarence Dill, the chief sponsor of the 1927 law, commissioners were supposed to be able to "give consideration to [the] great problems affecting the economic and social life of the country."³⁹⁴ These are not

388. "Radio," as one author asserted, "suffers now too much from standard programs. With Los Angeles broadcasting the same or about the same that New York sends out, there is now too little variety and provincial meaning in our programs." *Radio Gets Together*, CHI. DAILY TRIB., Oct. 7, 1924, at 8. Policymakers also were wary of AT&T and RCA's dominant market position. Nothing bothered critics more than the infringement suits against weaker stations and manufacturers. Pursuant to a congressional request, the FTC found that the four major radio companies had engaged in what appeared to be anticompetitive behavior. BARNOUW, *supra* note 372, at 162 (quoting N.Y. TIMES, Jan. 28, 1965).

389. *Radio Regulation Is Urged by Hoover*, N.Y. TIMES, Mar. 12, 1924, at 1.

390. *Id.* at 17.

391. *Id.* And, to be clear, Hoover's reference to public utility principles was likely a reference to the common-law principle of "juris publici" identified by Matthew Hale and later elaborated by Chief Justice Morrison Waite in *Munn v. Illinois*, 94 U.S. 113, 126-129 (1877), not rate regulation per se. The "public interest" here is expressed as an objective claim on behalf of merchants en masse to be free to engage in commerce.

392. Balanced Budget Act of 1997, 47 U.S.C. § 309(j) (2006).

393. See 47 U.S.C. § 302(a).

394. 67 CONG. REC. 12354 (1926) (statement of Sen. Dill).

problems for which simple “clerks” or “experts in radio technology” ought to be responsible.³⁹⁵ According to Dill, it was clear that radio regulation touched on something more elusive but no less important than technological know-how.³⁹⁶ Commissioners must be able “to study the questions, to consider them from every angle, and then to provide . . . fair, efficient, and equitable radio service.”³⁹⁷ The FCC must be bipartisan and comprised of people with an understanding “of the public’s interest, and particularly with a view to the future development of the radio art for the social and economic good of our people.”³⁹⁸

Participatory governance theory and early radio regulation suggest significant reforms for broadband policymaking. The example of the 1927 Radio Act, in particular, helps to illustrate how deficient broadband policymaking is today. Of course, the main concern for advocates of broadcast policy reform back then was the institutional and technological problem of signal interference. But reformers also sought to redress the impact broadcasting would have on public life. Indeed, it is this element, according to Senator Dill, that justified an elaborate process in which the major stakeholders would be required to attest to their programming’s beneficial civic impact.³⁹⁹ This, even as they already had developed sustainable technological and institutional standards among themselves.⁴⁰⁰ Policymakers aspired to create a comparative hearing process by which broadcasters would have to justify themselves as trustees responsible for the entertainment and education of the listening public.

The example of the 1927 Radio Act is not meant to be *prima facie* proof of the argument here that communications policymaking must be addressed to the public. Nor is it meant to validate the reactionary provincialism that infected policymakers in the 1920s or even argue that the public licensure regime was the correct legislative response. Rather, it serves as an example of the much more modest claim that communications governance—especially communications that are as pervasive as broadcasting and, now, the Internet—is too essential to republican conceptions of self-government to be left to private actors, no matter their expertise or beneficence.

Liberal deference in the contemporary context of broadband policymaking leaves too much to extralegal processes. It presumes that the technical transmission standards developed by the prevailing industry

395. *Cf. Id.* at 12354.

396. *Id.* at 12358.

397. *Id.* at 12354.

398. *Id.* at 12358.

399. *See, e.g.,* *F.C.C. v. Sanders Bros. Radio Station*, 60 S. Ct. 693, 696-97 (1940).

400. *See supra*, note 372.

standard-setting group have the weight of legal authority and can stand alone, in the first instance, as normative guides for substantive policy. Nowhere in the *Comcast* decision, for example, does the FCC meaningfully suggest that it might be concerned with the ways in which transmission standards might, more generally, affect public deliberation of questions of common concern. Nor, of course, did they really have to do so.

The closest the FCC comes to acknowledging as much is in two indirect ways that only prove the insufficiency of their efforts: first, the FCC convened two “public” hearings to hear evidence on Comcast’s practices at Harvard Law School and Stanford University,⁴⁰¹ and, second, the decision was styled as part of ongoing proceedings for which the FCC solicited public comment.⁴⁰² The first can be rejected out of hand as only public-regarding in name. The second is stronger but no more persuasive. To be sure, notice-and-comment proceedings conducted pursuant to the Administrative Procedure Act generally confer a notable degree of legitimacy on agency action.⁴⁰³ But the proceedings invoked by the FCC in *Comcast* were not meant to address the particular facts of that case or consider the general implications of its decision on civic life. They instead were quite modest; they were meant to gather data on industry-wide practices and the general state of broadband service.⁴⁰⁴ In other words, neither foretold an agency adjudication on whether Comcast’s particular network management practices were reasonable, nor did they even pretend to assure that, whatever reasonableness requires, public deliberation was in any way impeded. At best, the Notices promised to protect consumers’ commercial interests in using applications of their choice and promised that the FCC will initiate a subsequent rulemaking proceeding on how to assure the “reasonable and timely” delivery of service.⁴⁰⁵

401. See Broache, *supra* note 52.

402. Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, *Notice of Inquiry*, 22 F.C.C.R. 7816, para. 1 (2007); Broadband Industry Practices, *Notice of Inquiry*, WC Docket No. 07-52 (rel. Apr. 16, 2007) [hereinafter *Industry Practices NOI*].

403. See generally 5 U.S.C. § 553(c) (2006).

404. *Industry Practices NOI*, *supra* note 402, at para. 1.

In this Notice of Inquiry, we seek to enhance our understanding of the nature of the market for broadband and related services, whether network platform providers and others favor or disfavor particular content, how consumers are affected by these policies, and whether consumer choice of broadband providers is sufficient to ensure that all such policies ultimately benefit consumers. We ask for specific examples of beneficial or harmful behavior, and we ask whether any regulatory intervention is necessary.

Id.

405. Telecommunications Act of 1996, Pub. L. No. 104-104, § 706(a), 110 Stat. 56, 153 (codified as amended at 47 U.S.C. § 157 (2006)) (“The Commission and each State commission with regulatory jurisdiction over telecommunications services shall encourage

C. *Sketches for Reform: Privileging Civic-Minded Uses*

The prevailing norms in broadband policymaking are not civic-minded. For many commentators, this silence might be an asset. Governments, they argue, should not be in the business of deciding which uses are in the public interest and which are not. But, if we expect something more civic-minded from our communications law and policy, as historically we have, broadband policymaking requires something much more robust than deference to technological experts, self-interested broadband service providers, and application designers.

At a minimum, those aspects of communications that are directly tied to civic engagement should never be decided in the first instance by anything other than extant political institutions expressly created and democratically authorized for this purpose. As I explain above, neither the IETF nor any other self-regulatory organization meets that definition and, therefore, should not have the de facto first-instance authority to formulate rules that will affect the vibrancy and flow of communications on the Internet. Under the conception I present here, policymakers could, for example, take the example of the Postal Service and facilitate the creation of a packet-switching network that gives priority to some uses of broadband service without proscribing others.⁴⁰⁶ Short of that, Congress

the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans . . .”). With the possible exception of the 2009 *Notice of Inquiry* seeking comment on a new “national broadband plan,” see *Broadband NOI*, *supra* note 17, at para. 1, the slow pace and inaptness of the 2007 broadband proceedings, unfortunately, is symptomatic of the notice-and-comment rulemaking process at the FCC. See generally Philip J. Weiser, *FCC Reform and the Future of Telecommunications Policy*, FCC-REFORM.ORG, <http://fcc-reform.org/sites/fcc-reform.org/files/weiser-20090105.pdf> (last visited Feb. 23, 2010). The *Notice of Inquiry* published by the FCC earlier this year pursuant to the Recovery Act has done precisely what the 2007 proceedings and the *Comcast* decision failed to accomplish. *Broadband NOI*, *supra* 17. As I explained above, the national broadband plan that the FCC will deliver to Congress in March 2010, after the close of public hearings and the notice-and-comment period, will presumably recommend governance schemes that at least attend to the operation of civic life. It will presumably recommend ways in which policymakers might create opportunities for unprecedented levels of civic engagement. It presumably will then be up to Congress to formulate substantive policy (say, on network management practices and universal service) as well as rules for policymaking administration (say, on when if ever co-regulation is appropriate). That Congress will mandate policymakers to attend to civic life in broadband policymaking is hardly a foregone conclusion now. But, based on my argument here, that is precisely what they should do. As with early commercial radio regulation in the 1920s, policymakers today should be statutorily required to concern themselves with the social impact of the new medium as well as its technological and economic significance. As the Internet’s reach permeates commerce and public life, it is becoming too important to be left untouched by vigilant, robust, and unambiguous publicly legitimated oversight.

406. We see this in recent efforts by municipalities to create wireless and wireline broadband infrastructures for their constituents often in cooperation with private industry. See, e.g., Olga Kharif, *Why Wi-Fi Networks Are Floundering*, BUS. WK., Aug. 15, 2007, http://www.businessweek.com/technology/content/aug2007/tc20070814_929868.htm;

could require government subsidies for text-, photo-, or video-based journalism, Internet literacy for otherwise underfunded primary and secondary school students,⁴⁰⁷ live video-conferencing between doctor and patient, and e-government initiatives⁴⁰⁸ (e.g., online access to department of motor vehicles data and forms, contemporaneous updates and affordance for public comment on pending local, state, or federal agency action or legislation). These applications and uses are wholly different from and arguably more specific and public-spirited than applications and protocols for, say, auctioning or video sharing or online dating or multiplayer gaming, although there is a good argument that there are social benefits from such uses.⁴⁰⁹ In any case, consistent with the theory of participatory governance I have presented here, publicly elected officials are best able to prescribe and encourage specified uses, applications, and network infrastructure that relate to civic engagement, citizen empowerment, and

Richard Martin, *Silicon Valley Cities Pause, Reflect on Muni Wi-Fi Commitment*, INFO. WK., July 23, 2007, <http://www.informationweek.com/news/mobility/wifiwimax/showArticle.jhtml?articleID=201200308>. See generally FTC STAFF REPORT, MUNICIPAL PROVISION OF WIRELESS INTERNET (2006), available at <http://www.ftc.gov/os/2006/10/V060021municipalprovwirelessinternet.pdf>.

407. See Jenkins, et al., *supra* note 162, at 19-21. Froomkin has argued for socializing new users in the nonhierarchical communicative protocols of the Internet. Froomkin, *supra* note 4, at 820. Published Frequently Asked Questions (FAQs), he offers, “set out the basic rules of Internet conduct, or ‘netiquette,’” for new users. *Id.*

408. In the E-Government Act of 2002, Congress established the Office of Electronic Government to, among other things, upgrade and standardize federal Web sites, share best Web site management practices, and improve privacy protection. Pub. L. No. 107-347, 116 Stat. 2899 (2002). See also Beth Simone Noveck, *The Future of Citizen Participation in the Electronic State*, 1 ISJLP 1 (2005).

409. Public disclosure of broadband deployment and access, in order to ensure universal service and baseline access, are modest but also public-regarding measures. Policymakers have sought to collect and map broadband service nationally in spite of major broadband service providers’ desire to keep that information under wraps for competitive reasons. Recall that one of the main remedies in the *Comcast* case was public disclosure of the cable company’s network management practices. See *supra* Part II.B.1. Consider, moreover, recent data reporting and mapping efforts by the FCC. Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Development of Advanced Services to All Americans, Improvement of Wireless Broadband Subscriberhip Data, and Development of Data on Interconnected Voice over Internet Protocol (VoIP) Subscriberhip, *Report and Order and Further Notice of Proposed Rulemaking*, 23 F.C.C.R. 9691 (2008) (reporting data and mapping information on the number of broadband connections in service, speed, mobile wireless subscriptions, and VoIP subscriptions). Consider as well the Broadband Data Improvement Act § 1301, Pub. Law No. 110-385, 122 Stat. 4096 (2008) (codified at 47 U.S.C. § 1301) (requiring, inter alia, the FCC to report annually on geographic areas of the country that are not served by any broadband provider and to compare broadband speeds), and the American Recovery and Reinvestment Act of 2009, Pub. Law No. 111-05, § 2, 123 Stat. 115 (2009) (requiring data collection on and mapping of broadband service).

equity.⁴¹⁰ Structured in this way, broadband policymakers would do more than adjudicate on the basis of opportunities for network neutrality, consumer choice, or network efficiency. They would promulgate democracy-enhancing broadband use. But, again, such prescriptions could only come after Congress finally promulgates a regulatory regime that places the public at the center of broadband administration.

V. CONCLUSION

The chief aim of this Article has been to illustrate the manner in which the prevailing approaches to broadband governance and policy do not attend to civic-minded concerns. I did this, first, by developing a three-part taxonomy of broadband policymaking today that is comprised of a technological approach, an economic approach, and a participatory approach. I argued that there is a significant deficiency in broadband policymaking today, as the first two and more prominent approaches defer to engineering and economic principles at the expense of civic and political concerns associated with vibrant civic life.

As such, I argued, Internet governance today is not fully adapted to the technology's dramatic public influence. The Internet instead should be governed pursuant to the same publicly legitimated institutional processes to which almost all other public activities are. The Article does not challenge the normative commitment in the technological approach to open network design or the economic approaches' commitment to efficiency as much as the process by which broadband law is formulated, particularly now that engineering standards themselves are contestable. In contrast to scholarship on co-regulatory governance schemes which defer first-instance rulemaking to private self-regulatory organizations, like the IETF, I argue that participatory governance theory offers a fresh and necessary approach to Internet policymaking. As a general matter, it recommends implementing procedures that incorporate public-minded or at least democratically legitimized considerations not within the competence of engineering or economics.

410. Cf. Werbach, *supra* note 237, at 67, 74-75 (proposing that policymakers distinguish between a legally prescribed baseline of service and a complementary ceiling; the latter would address network owner concerns over efficiency and the former would be civic-minded).

